

AR51

1976 Dow Annual Report

DOW



HIGHLIGHTS

Operations Summary (in millions)

	1976	1975*	% Change
Net sales	\$5,652.1	\$4,888.1	+15.6%
Depreciation	404.2	347.4	+16.3%
Research and development expenditures ...	187.5	167.4	+12.0%
United States and foreign income taxes	421.6	476.0	-11.4%
Net income	612.8	632.4	- 3.1%
Net income per share (in dollars)	3.30	3.41	- 3.2%

Average common shares outstanding	185,411,644	185,205,394	+ .1%
Common stockholders	112,297	98,152	+14.4%
Employees	53,000	53,100	- .2%

*Restated — see Note A, page 25.

Annual Meeting The 1977 annual meeting of stockholders will be held at 2:00 p.m. (PDT) Wednesday, May 4, 1977, at the Richmond Memorial Auditorium, Civic Center Plaza, Richmond, California.

A formal notice of the meeting, with a proxy statement and form of proxy, will be mailed to each stockholder separately from this report.

A copy of the Company's annual report to the Securities and Exchange Commission on Form 10-K will be provided without charge, when available, to any stockholder requesting it in writing addressed to the Secretary of the Company, 2030 Dow Center, Midland, Michigan 48640.

Cover: Shown on the cover is Frank S. Zak, a journeyman welder in the Midland plants of the Michigan Division of Dow Chemical U.S.A. Zak, who lives in Midland, Michigan, has been an employee of The Dow Chemical Company since 1942.

TO OUR SHAREOWNERS



Zoltan Merszei

For an organization like The Dow Chemical Company, 1976 presented an unusual challenge. The Company's sales grew by approximately 15 per cent, but our profits were down slightly. A major part of the reason for this decrease was due to the prices we were able to obtain for our products. They did not make up for the relentless increases we encountered in energy and raw material costs.

Even so, Dow's worldwide positioning and flexibility have been very good for us. During a period beset by currency fluctuations and numerous uncertainties in market conditions, we have been able to maintain an enviable control of our own destiny.

This is the record: 1974 was the most remarkable year of growth in Dow's history. We then lost two years of normal growth in the sharp recession of 1975 and the slow recovery of 1976. Yet, at the end of that two-year period, Dow's earnings had moved up by 15 per cent over 1974, and our physical volume had returned to 1974 levels.

During the first portion of 1976, the Company's growth was highlighted by our results in the United States, where we have approximately half of our business. Then, as the American economy flattened out during the latter part of the year, Europe, Latin America, Canada and the Pacific areas showed improvement. Details on each area's performance can be found in this report.

In addition to rising costs, we were also faced with weakening prices for some of our products in various parts of the world and with a decreasing value of some currencies, particularly in Europe and Latin America.

In a year like 1976, the concept of continuing to improve efficiency in every sector of our activities was more than just desirable; during a period of rising costs and growing human expectations, our determination to increase productivity and efficiency while further reducing pollution was essential to our Company's present and future welfare.

Certainly, Dow is investing heavily in the future. For the first time in our history, we spent more than \$1 billion in capital investment. Much of that amount was for expansion throughout the world, but a sizable segment was invested to improve the efficiency of existing facilities.

A major, continuing effort is under way to increase the number of manufacturing locations which are "self contained, meaning that all process water is recycled so that none reaches waterways and systems outside of the facilities." At four locations in the United States—Dalton, Georgia; Hanging Rock plant, near Ironton, Ohio; Pittsburg, California; and the Riverside plant at Pevely, Missouri—all of our process water is already being completely recycled. These are firm evidence of our determination to achieve zero water pollution as we continue to improve upon our technology. We remain convinced that as we continue to minimize pollution, we increase our efficiency and thus our profits.

Increasing costs of energy and feedstocks, as well as currency fluctuations are long term challenges to us, and we are treating them as such.

In any event, our expansion means that we are now prepared to take advantage of the next surge in demand for chemicals. We expect to see this begin during 1977 and continue at least through 1978.

Our safety record showed significant improvement during 1976, as measured by frequency rate. However, there is still plenty of room for improvement in our severity rate.

Dow's frequency rate for disabling injuries came to 0.55 per million man hours worked, down from 1975's frequency rate of 0.78. One of the most remarkable contributions to our safety record was provided by more than 5,000 research employees around the world, who completed the year without a single disabling injury. Other outstanding performers were the employees at the manufacturing facility at Stade, West Germany, and in the Latin American area.

We see continued economic growth around the world—and with that growth, increasing demand for our products. There is no industry in the world better equipped to do something about the world's problems than the chemical industry. Without doubt, these problems are growing.

In such an environment, we should be able to recover energy and raw material cost increases through higher prices for our products. Considering the far-ranging problems they are helping to solve, high technology chemical products are easily among the best bargains one can find on this earth today.

This annual letter to you would not be complete without the noting of several management changes which were made during the year.

As announced at the last stockholders meeting, Ben Branch, president and chief executive officer since 1971, became chairman of the board of directors; Carl A. Gerstacker, chairman of the board since 1960, retired from that position but remained as a member of the board and as chairman of the board's fi-

nance committee; and I became president and chief executive officer.

Later in the year, Macauley Whiting, a director since 1959, resigned from the board but remains as a consultant. In January of this year, David L. Rooke, vice president of Operations, Dow Chemical U.S.A., was elected to the board.

These were significant changes. But they should not imply any major differences in the management and the goals of your Company. We remain loyal to the traditions and practices which have been the life blood of Dow during its eight decades of existence, since it is these which have made it possible for our employees to provide the growth in sales and profits we have experienced.

In the beginning, I touched upon the Company's flexibility. A major, continuing contributor to that elusive but vital quality is Dow's research effort. During 1976, more than \$185 million was spent. We are projecting another \$200 million in 1977 for a wide variety of projects aimed at improving our over-all product mix as well as the processes we use to make them. If any of our products is to become obsolete, we are determined that this obsolescence will stem from our own research efforts, rather than from the efforts of others.

A major, worldwide position in our industry is something which is built up gradually—and maintained only by a conscious, continuing effort. This applies whether we are talking about product mix or geographical distribution or the adaptable, productive 53,000 Dow employees of many skills and nationalities who again contributed to our position as a leader in 1976.

Our goals are clear:

- Since the road to increased dividends, fair "pay for performance" for our employees, and expansion to provide for our customers' growing needs must be paved by increasing our earnings per share on a continuing basis, we are determined to do just that.

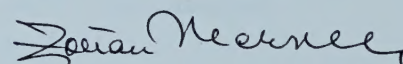
- We will continue to be a leader in energy conservation while at the same time working to develop new raw material sources, either through new technology or acquisitions.

- We plan to build upon our capacity to provide plastics and chemicals for shelter and clothing, which are still sub-standard in many parts of the world.

- We will improve upon and expand the use of our agricultural chemicals and human health products—again, a growing necessity everywhere.

- The above must be accomplished while we continue to reduce pollutants. Against any and all odds, we are determined to leave this world better than the one we found.

During 1976, our employees accomplished much toward achieving those goals. We owe them our thanks for another successful year, and we place our confidence in them for the future.



Zoltan Merszei

STRATEGY

"Strat-e-gy: A plan, method, or series of maneuvers or stratagems for obtaining a specific goal or result... (from the Greek strategia, generalship)..."

—Random House Dictionary

Organizationally, The Dow Chemical Company is unabashedly "different". It's flat and decentralized; there are few layers of management between bottom and top; and the five major component organizations—Dow Canada, Dow Europe, Dow Latin America, Dow Pacific, and Dow U.S.A.—are to an unusual degree autonomous and independent of each other and of corporate headquarters. Headquarters itself is made up of about 250 employees, or one-half of one per cent of the company's 53,000 population. The board of directors is composed entirely, as of the end of 1976, of full-time or former full-time employees.

Such an organization has great advantages—it clearly, for example, puts the challenges, the responsibility, and the decision-making out "in the field", where they should be, where the action intelligence is. It also puts a premium on quality personnel at all positions and it helps to develop personnel who are broad-gauged and flexible.

On the other hand, the resultant intense competition between areas can pose problems. How can the Company's overall resources be marshalled to generate peak productivity in spite of the independence of its geographic units? How can the Company decide which proposals, from the various units, merit support and financing; which should be postponed? How does the Company settle differences in priority between one unit of the Company and another? And how does it develop the



Capital planning coordination, such as that used in developing plans for this plant for polyethylene production in Hong Kong, is one function of Dow's Corporate Product Department.

best company strategy globally for the location, size, and product mix of its manufacturing plants, and for the marketing of their products?

In brief, how does the Company develop and implement its long-term strategy—clearly an executive function?

The problem was fully recognized in 1968, during the corporate presidency of H. D. Doan, when Dow was reorganized along its present geographic lines. The solution: establish a new department especially staffed and mandated to manage just this type of problem. It was called (and still is) the "Corporate Product Department", or "CPD". At the end of 1976 it had 42 employees. From the beginning it has been a staff group to the president and chief executive officer. Its leading managers, who are called "corporate product directors", are in constant communication today with Zoltan Merszei, the current chief executive.

Robert E. Monica, one of two original 1968 product directors still on the scene (the other: J. Ernest Mitchell, corporate planning director) recalls the beginnings: "Ben Branch (now chairman of the board) asked a number of us the question, 'how do you manage products on a worldwide basis when you have autonomous areas?', and the department evolved largely from those conversations.

"As a department our function was to be the allocator of corporate resources and the referee of disagreements among the geographic areas. Part of my job was to go around and help the areas develop profitable projects in plastics, and in general the department's assignment has been to do that—to build product business around the world and do it profitably. We do this by suggestion and salesmanship, backed up by agreed-upon global product strategies, but never by fiat. We've always worked closely with the directors of business development in the areas toward a strategic consensus."

The CPD currently has five directors: Monica, Mitchell, R. Malcolm Barbour, John M. Flynn, and Paul G. Stroebel. As corporate product directors they report to H. H. Lyon, administrative vice president, the department head.

Flynn and Stroebel are recent transfers to the department, Flynn having been until late 1976 general manager of the U.S.A. Styrene Plastics Department and Stroebel vice president of

business development for Dow in Europe. (Their predecessors were interviewed for this article. R. Bruce Johnson is now a vice president of Dow Chemical U.S.A., and Richard F. Bechtold is now vice president of business development for Dow Europe.)

In a workaday sense the department's job involves such tough but vital matters as working out a balanced company capital investment program in respect to products and to geographic areas. The program spending proposals may start out at an annual level of two billion dollars. The CPD's job is to mold these into a Dow investment program that will provide the best possible year-by-year growth strategy for Dow and its 2,300 products, some of them produced on every continent. (Total planned capital expenditures in the years immediately ahead are in the \$1 billion to \$1.1 billion range.)

"The department has to be a balancing force", Barbour says. "The areas are competitive. Each one wants to grow faster than any other area. It takes a lot of seasoned judgment to sort things out because the area management may not always appreciate or understand some of the things we are urging on them, and we sometimes have a considerable task convincing them of what we think is best."

"About 90 per cent of the decisions we make are good both for the area and for the Company," Johnson explains. "These are no problem. But perhaps 10 per cent of the decisions

Product marketing strategies are developed jointly with the business managers of the areas and the CPD.



involve matters that may be good for the area but not good for the company, and these are a problem. If you can show definitively that the decision is a questionable one for the company, though, that's usually enough to change or defer the proposed action. The other side of the coin is our concern for the well-being of the country in which we're operating—that's always a prime consideration."

The department is involved in a lot besides capital investment policy, such as:

- allocation of products in short supply;
- pricing consistency in the world market;
- in cases of excess capacity, bringing about the best balance to Dow's world operations;
- developing long-term global product strategies; and
- serving as a clearing-house for technical, business, and financial information and know-how.

As overall guidelines, they and others follow Dow's International Business Principles, which promote good relations between Dow and the host governments of countries in which we operate. Dow also supports the guidelines for International Investment and Multinational Enterprises, adopted by the Organization for Economic Cooperation and Development.

Several of the product directors serve as members of the boards of directors of subsidiaries and joint ventures, and are intimately involved in the planning of their major project proposals and new products.

"We have to be diplomats, mediators, counselors, and highly professional businessmen, and we have to take into consideration not only the geographic area's strategy but the product and corporate strategy as well", Bechtold observes. "As we grow bigger the job of integrating Dow is becoming more complex and difficult, and the CPD will be continually more involved in that job, I'm sure, as time goes on".

In the development of corporate strategy, Barbour says, "The corporate product director must see the totality of the problem and the continuity of it. The area person is not always in a position to see this. The corporate product director needs to be strong from the viewpoint not of control but of direction; once he knows where things ought to be going then he should be extremely tough-minded about getting there".

Adds Mitchell: "Aside from the board of directors, the CPD is the only established corporate entity with worldwide business knowledge and perspective, so in addition to these other things it also somewhat naturally and necessarily serves as a business intelligence center. It has a major communication function in respect to product and geographic conditions as they affect the corporate interest, and in respect to such matters as the maintenance of a common commercial and technical language around the Dow world".

Bechtold: "A Dow area is like a territorial animal, and as long as it is we'll need some method of setting overall priorities. The area people are expected to be provincial and opinionated in favor of their projects and geography—they identify with their area and their product very closely—and the CPD can sometimes appear to be a threat to them because it has good access to the top management. The key to this is that Dow is extremely open and depends heavily on open communication; the greatest danger to Dow would be people clamming up—we assume and promote open communication".

What sort of person gravitates to the CPD's strategy-planning efforts, work that Lyon says is characterized by "low surface profile and high subsurface influence"?

Formal educational background and skills are not especially important, Lyon says. "There's no one mold, academically, professionally, or geographically, and the corporate product directors operate with entirely different individual styles. They come from marketing, from manufacturing, from research—and



Monitoring proper product distribution to meet different market demands around the world is a responsibility shared between the CPD and Dow's five geographical areas.

some of them have served tours of foreign duty. They must be skilled at getting things done through people, rather than doing things themselves, and they need a high degree of sensitivity in dealing daily with a variety of different cultures around the world. Their forte is their recognized expertise and their ability to sell their viewpoint. They need to be persuasive, logical, and articulate. This is a special breed of cat, and it takes years of Dow seasoning to develop them."

If the CPD's job is simply to be persuasive rather than setting rules and making unilateral decisions, how can it be expected to work? Ben Branch gave a clue to the answer some years ago when he told Dow's top managers: "The CPD is the force holding all of the orbiting areas into a homogenized whole in the Dow system. It is the only way open to have reasoned balance between Dow objectives and national objectives, between one area's desires and conflicting desires by another. There is no other way to sort out and rationalize the priorities of Dow people and money. It is the only organization we

can hold responsible for the assembly and communication of Dow-generated ideas, methods, and uses."

Zoltan Merszei has confirmed this more recently: "All the areas have to participate with you in coordinating Dow strategies", he told the CPD. "You must help stimulate our people in the various areas to drive for continued growth in sales and profit by keeping them informed of what we have to contribute, even though the strategies for individual area growth must be left up to the areas. We want you to serve, where necessary, as catalysts in starting new business actions and in helping to communicate good and practical ideas. Dow will continue to pioneer in new geographical areas and you should assist effectively in this endeavor."

That is the charter of the CPD and in a general sense the current strategy of the Company.

UNITED STATES

In an economic climate that turned sluggish at mid-year and remained so, Dow Chemical U.S.A. continued in 1976 its commitment to selling quality products in markets that experienced steady, but slow growth.

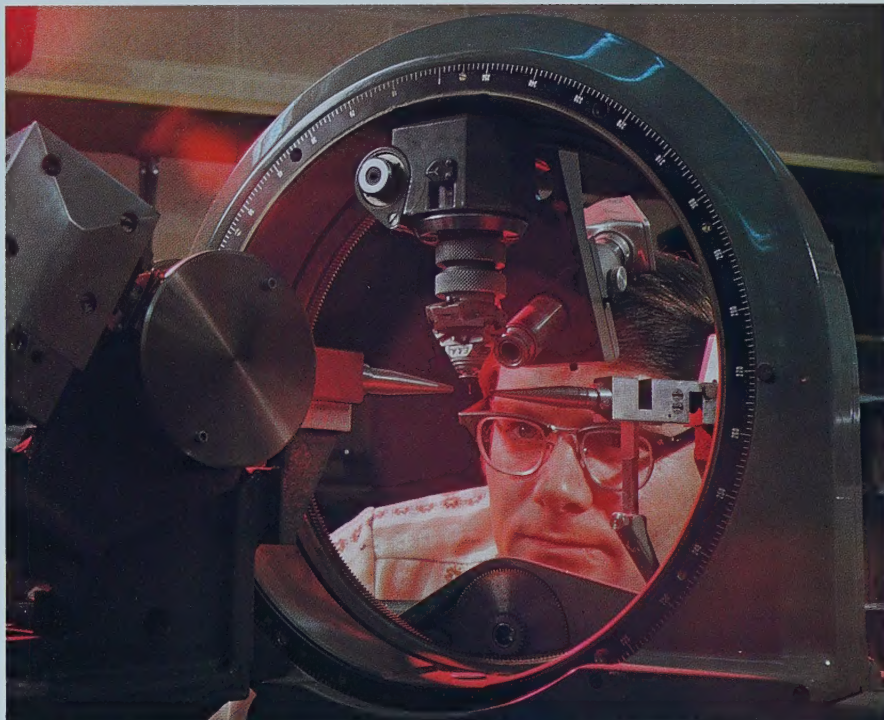
Sales for Dow U.S.A. increased 13 per cent, reaching \$3.077 billion from 1975's sales of \$2.724 billion.

Operating income for the year increased 1 per cent to \$632 million, compared to 1975's total of \$629 million.

The ability of Dow U.S.A. to increase its operating income over the previous year, in a domestic economy that experienced relatively slow growth, results from the broad product and market diversification that exists within Dow U.S.A. Such broad bases are characteristic of the entire company. As an example, demand was weak for STYRON polystyrene, caustic soda and antifreeze, but strong for chlorinated solvents, polyethylene, plastic foams and services of Dowell, an oil and gas well servicing division.

Within the area of employee relations, two outstanding achievements occurred in 1976. The safety record showed considerable improvement, and significant progress was made in the Company's efforts to develop meaningful job opportunities for all individuals.

In safety, 1976 was the best year ever in efforts to reduce disabling injuries. There were 40 disabling injuries and three fatalities in 1976, compared to 61 disabling injuries and three fatalities in 1975. The goal, of course, is to achieve zero job related injuries or deaths. At year end Dow U.S.A. was second in the chemical industry in safety performance, and was among the top three per cent in safety performance for all U.S. industry. The



Nearly one out of every 10 Dow employees is engaged in research.

incident likelihood of a disabling injury per million manhours worked was about one-seventh of the average for the chemical industry, which has one of the best safety records in all U.S. industry.

At the start of 1976, Dow U.S.A. began participation in a unique self-audit program approved by an agency of the U.S. government. Designed to measure progress in achieving Equal Employment Opportunity (EEO) goals, the program has been considered a success. A copy of the Company's EEO report is available upon written request. The agency's review of the self-audit program reported that:

"Dow has developed a number of programs which are so innovative and have such high potential for setting new standards in the EEO field that they deserve special recognition... The strength of Dow's commitment to EEO, the innovative nature of its programs and the dramatic results achieved, have propelled the Company into a position of recognized leadership in the chemical industry and also among companies in other industries which have become aware of the Dow activities

through compliance contracts with ERDA (Energy Research and Development Agency). Such a leadership role is unique in ERDA's experience, since companies in the past aimed, at best, for a posture of acceptability."

Efforts also continued in 1976 to improve even more upon energy conservation achievements. Through the implementation of process improvements and modifications to existing plants to increase operating efficiency, it has been possible to achieve energy savings of as much as 40 per cent and more in 1976 on certain projects. An example is a recently completed plant in the Texas Division at Freeport, Texas, which went on stream in 1976. It has improved heat recovery units and uses 1,576 BTUs (British Thermal Units) per pound of product produced. Without the more efficient heat recovery units, each pound of product produced in the plant would require 4,160 BTUs of energy.

Dow U.S.A. also maintains an energy accounting system, believed to be

unique in the chemical industry. It is designed to accurately monitor energy usage on a daily basis in every plant, measuring the amount of energy used in product production with the goal of optimizing available energy resources.

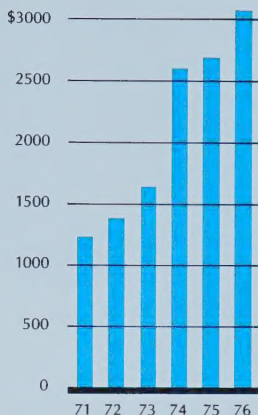
Among efforts to ensure adequate energy and hydrocarbon feedstocks for Dow U.S.A. are two construction projects underway on the Gulf Coast. Work continues on a crude oil processing unit at the Oyster Creek Division, located at Brazosport, Texas. When completed, it will have capacity to process 200,000 barrels of crude oil daily, producing fuels and feedstocks for Dow U.S.A. manufacturing plants located along the Gulf Coast. A related hydrocarbon facility is now under construction at the Louisiana Division, near Plaquemine, Louisiana. It will have the capacity to produce one billion pounds per year of ethylene, 600 million pounds annually of propylene, and associated benzene, crude butadiene and heavier hydrocarbons to provide raw materials for derivatives growth. Both projects will enable those facilities to be more energy self sufficient.

Rising energy costs also increased consumer awareness of a Dow product used for insulation. The Dow residential insulation system utilizing STYROFOAM brand insulation continued to gain wide acceptance as the way to reduce fuel costs in new homes, prefabricated housing, and apartment construction. Regional and national chain building materials suppliers began carrying STYROFOAM brand insulation in 1976 to meet rising demand for this product.

DOWEX ion exchange resins, whose many uses include effective demineralization of water for power generation and the recovery of wastes from process streams, have become instrumental in the rapid expansion of uranium mining and in the technology of manufacturing sugar from corn. Construction of a new ion exchange resin plant in Midland, Michigan was completed in 1976, helping assure a reliable supply of these resins for standard and new uses.

Sales

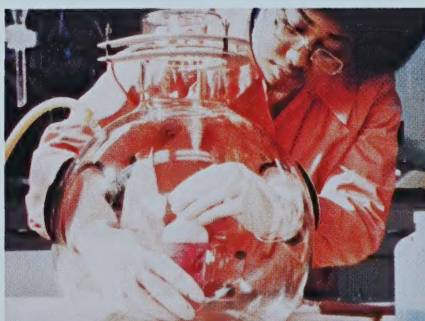
(Millions of Dollars)



Significant achievements throughout various product areas occurred in 1976. Dow U.S.A. moved closer to becoming a single source of total service to the urethane industry with the opening of new laboratory facilities and the company's first plant for making toluene diisocyanate (TDI), a primary reactant in the manufacture of urethane products. The Dow-patented process for making urethane sponge-backed carpeting also was extended in 1976 to include application to more types and styles of carpet.

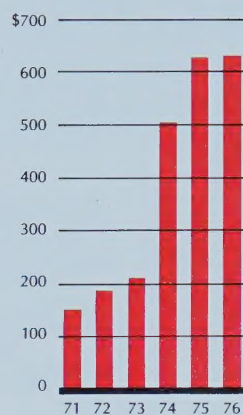
Cotton batting combined with up to 40 per cent SARAN resin and passed through an oven, is finding worldwide acceptance in the bedding and furniture markets. This "new" cotton batting is easier to handle, more compact, can be preformed into per-

A research chemist in the toxicology laboratory of Dow U.S.A. Health and Environmental Research, conducts a test using a "dry tank" to maintain air purity.



Operating Income

(Millions of Dollars)



manent shapes and die cut and increases flame retardant characteristics.

Among new agricultural products, *N-SERVE*, nitrogen stabilizer has been outstanding, both in boosting crop yields and conserving nitrogen, and *LORSBAN* insecticide has been well accepted by cotton and corn growers throughout the U.S. as an effective insect control agent.

LORELCO, an effective new drug for the reduction of elevated serum cholesterol, has been approved by the U.S. Food and Drug Administration. Its product launch will be announced this spring at the annual meeting of the American College of Cardiology.

ZIPLOC sandwich bags, a smaller, lighter weight version of the popular, Dow developed plastic storage bag, has been test marketed in several cities. Production facilities for national distribution have been authorized and full introduction is anticipated in mid-1977.

Another factor which contributed to profit growth was an increase in exports. During 1976, exports of U.S. manufactured goods amounted to more than \$567 million, a 22 per cent increase over \$465 million in 1975. Approximately 6,000 employees were engaged in the manufacture of goods for sale in markets in other parts of the world. At year end, total Dow U.S.A. employment stood at 31,900.



Computerized operations, such as in this control room at Barry, the United Kingdom, help to assure maintenance of quality product standards around the clock.

Dow Chemical Europe maintained an employment level of 11,600 in 1976 with more than 99 per cent of all employees European nationals. A successful integration of Lepetit into existing regional operations reduced employee levels slightly but will assure a more competitive organization that can respond quickly to the future.

In safety, Dow Europe lowered its number of disabling injuries from 12 in 1975 to eight in 1976. This improvement, however, was marred by two of the injuries being fatalities; both resulted from plant explosions, one at King's Lynn, U.K., and the other at Tessenderlo, Belgium.

During 1976 a major 10-year economic trade agreement was reached between Dow and East Germany. The long-term cooperation accord allows for two-way trade. An agricultural chemicals research agreement was also reached between Dow and the U.S.S.R. Poland and Dow Chemical Europe also signed economic trade agreements in 1976.

Even with depressed housing and construction industries in Europe, **STYROFOAM** brand plastic foam and **ROOFMATE** roof insulation had record years. Both should show continued excellent growth in the future.

DURSBAN insecticide again proved highly successful in cotton growing areas as more emphasis was placed on broader applications into the Mid-East market. Polyurethane chemicals, **METHOCEL** cellulose ethers used as thickening agents and epoxy resins also were top performers. Dow Europe also entered the polyester polyols market for the first time in Europe. In September, 1976, Dow became the first U.S. company to open a representative office in East Berlin, German Democratic Republic.

on sales was once again the highest among the European chemical industry.

A concerted marketing effort during 1976 resulted in a 21 per cent increase in physical volume at higher local currency selling prices. The higher prices partially offset increased manufacturing and raw material costs, although the weakening of many European currencies against the U.S. dollar diminished the effective price increase. In 1976, Dow Europe produced locally 84 per cent of the products sold. As the market area served by Dow Europe expands, it is expected the percentage of local production will increase gradually throughout the decade.

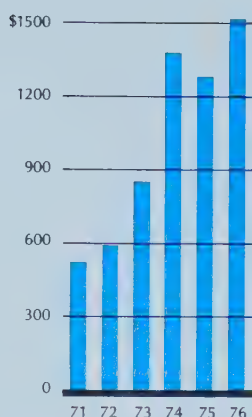
EUROPE

Dow Chemical Europe achieved record sales in 1976, despite the slow economic recovery throughout Europe from the 1975 recession.

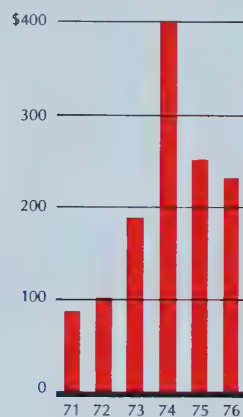
Sales for the year were \$1.503 billion, up 18 per cent from \$1.273 billion in 1975. Operating income declined 8 per cent, to \$230 million, resulting mostly from cost-price and currency problems in Western Europe. Despite this decline, the return

Dow Europe pharmaceuticals operating income increased significantly from the unsatisfactory level of 1975. The Italian Region had a profitable export year but saw reduced income in the domestic pharmaceuticals market due to government price controls. Rifampicin for tuberculosis treatment continued to be an outstanding product and *ALADIONE* anti-inflammatory rheumatoid drug, used to ease pain associated with rheumatism, was successfully introduced in Spain and Portugal. Lepetit also announced plans to build a new combined administration and research and development building near Milan.

Sales
(Millions of Dollars)



Operating Income
(Millions of Dollars)



In Yugoslavia, The Dow Chemical Company and Industrija Nafta (INA) completed plans and obtained final government approval to proceed with a \$700 million joint venture project (DINA) to build a major petrochemical complex on the Island of Krk near Rijeka. World scale facilities to produce low and high density polyethylene, vinyl chloride monomer, styrene and ethylene are scheduled to be completed between 1979 and 1982. When completed, production from these facilities will mainly serve a growing domestic market in Yugoslavia, with some exports to other markets.

Construction of a polystyrene plant at Zagreb, Yugoslavia, began for DOKI, the joint venture between Dow and Organsko Kemijska Industrija (OKI). The project is scheduled for completion in 1977.

In Huelva, Spain, a letter of understanding between Dow Iberica and Cepesa and Petromed was signed for a possible joint venture to build an ethylene plant in the future. Dow has also announced plans to eventually build a chlor-alkali complex at the location. In Spain, additional capacity was added for low-density polyethylene in Taragona and titanium dioxide in Bilbao.

At Stade, West Germany, the first European methylene chloride plant for the production of solvents was completed, along with an expansion in chlor-alkali and a new world scale plant to manufacture *CHLOROTHENE* solvent. Plans were

also announced to construct an ethylene amines plant for a 1979 start-up.

Continued progress was made on a new harbor and industrial land addition at Terneuzen, The Netherlands. The project will provide docking for 60,000 ton vessels and the development of a 285-acre industrial site on reclaimed land from the sea. Another low-density polyethylene production facility was added at Terneuzen in 1976.

Significant contributions were made in the rigid urethane chemistry group using primarily technology developed in Europe to expand the potential market of refrigeration applications, and in product gloss improvements for ABS thermoplastics.

In the research and development area, a new program of diversification for the agricultural chemicals group was initiated. The technical headquarters group moved from Horgen to King's Lynn, U.K., and technical support people were placed in Vienna, Austria, to better support the expanding Eastern Europe region, which offers good market growth potential.

It was a year of political change in Europe. National elections in West Germany, Italy, the United Kingdom, and Sweden indicated a shift in political and economic policies of those governments, which should help their economies to stabilize and provide greater opportunity for long-term growth.



Plant expansions, such as this at Terneuzen, The Netherlands, are common sights at Dow facilities around the world.

Dow Europe continued its capital investment program in spite of a depressed European investment climate. More than \$200 million was spent on new capital projects and expansion of existing facilities as well as improving existing plant efficiencies.

LATIN AMERICA

Dow Chemical Latin America registered gains in both sales and operating income in 1976, despite a second consecutive year of generally sluggish economic activity.

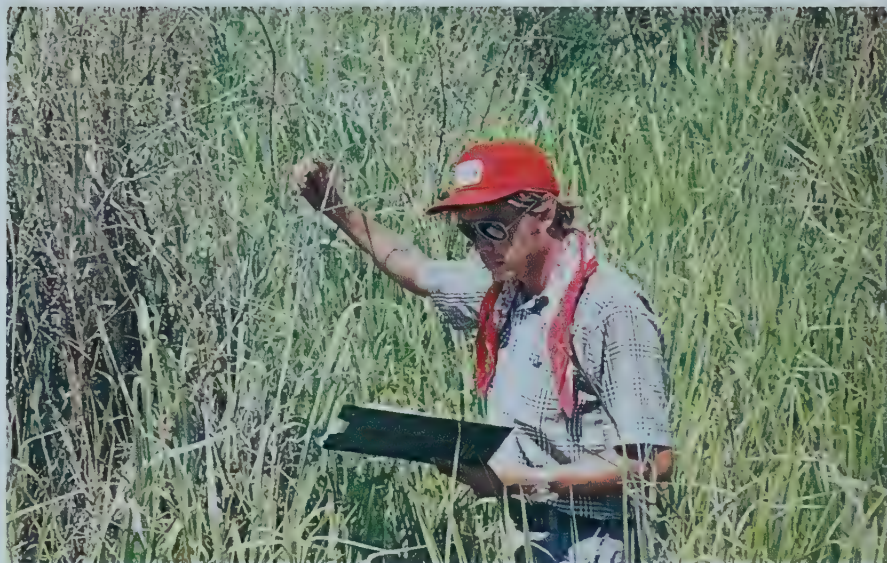
Sales were \$432 million, up 12 per cent over 1975, while operating income increased to \$104 million, a gain of 28 per cent over 1975.

Increases in sales and operating income were achieved in a poor economic climate throughout Latin America. Inflation continued at the three-digit level in Argentina and Chile, although both countries reduced the rate over 1975; Brazil's inflation rate reached 40 per cent after a decade in the 15-30 per cent range. Continued deficits in the balances of trade brought about strict import restrictions which tended to decelerate the level of economic activity and stimulate inflationary pressures.

To counter those negative factors, Dow Latin America made improvements in vital productivity areas such as sales and profits per employee and unit manufacturing costs. The Dow Latin America area also was able to end 1976 with modest overall improvements over 1975 price levels.

With the exception of caustic soda, the chemicals business registered physical volume and profit gains in 1976. Organic and inorganic chemicals, plus the oxides and derivatives group, all posted increases over 1975.

The pharmaceuticals business, fully integrated into Dow at year-end 1975, made substantial improvements in its performance during a year of streamlining which resulted in strengthened product mix, reduced inventories and increased productivity. A new product,



A Dow researcher observes test results of a brush control experiment using Dow herbicides in Mexico.

ALADIONE anti-inflammatory rheumatoid drug, used to ease pain associated with rheumatism, was launched in 1976 and promises to capture significant market share.

Designed products continued in their role as Dow Latin America's fastest-growing products, due partly to increased demand for latexes and epoxy resins and, partly, to new products such as **VORANOL 456** polyol, a general-purpose rigid urethane foam intermediate produced at Guaraju, Brazil.

Growth in specialty products, through achievements in research and development, also has been favorably affected by a successful program to develop a market for **DERAKANE** reinforced plastic resins in Brazil. Three years ago Dow had no sales of **DERAKANE** resins there. Now, after an aggressive marketing effort, Dow has developed new markets for these resins, a local production plant in Sao Paulo, and has trained Brazilian sales and R&D specialists.

Plastics qualifies as the "recovery business" of 1976 in Latin America. Beset by volume and pricing problems in 1975, the plastics business increased its physical volume by over 35 per cent, stopped its pricing decline, increased its manufacturing efficiency, standardized its product mix of **STYRON** polystyrene and saw

the local demand for this plastic increase in both Brazil and Chile.

In the agro-vet sector, Dow Latin America continued its record of consistent growth in both sales and profits. It solidified its position as Dow's leading seller of **TORDON** herbicides, considered one of the keys to tapping Latin America's vast agricultural potential. In addition, Dow launched three new products—an insecticide, a tickicide and an anthelmintic for control of roundworms in cattle—and formed an Area-wide Distributor Council which is strengthening distribution channels for all agro-vet products.

In manufacturing, Dow Latin America continued its practice of increasing local production capacity where appropriate. Capital spending exceeded \$117 million with most of that total going to a huge petrochemical complex at Aratu in northeastern Brazil. Of goods sold by Dow Latin America, nearly 52 per cent was produced locally.

At Aratu, Brazil, work continued on a major new manufacturing complex. An administration center and a bulk marine terminal were completed at that site during 1976. By the end of the first quarter of 1977, the start-up of propylene oxide, propylene glycol and chlor-alkali plants should be underway. When fully operational they will make Dow among the three largest producers of caustic soda and chlorine in Latin America. Other chlorine derivative plants are scheduled to come on-stream later in 1977 and 1978.

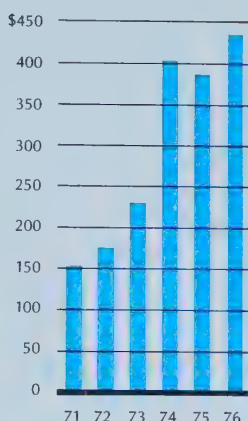
Other manufacturing progress was reported in production of styrene-butadiene latex and VORANOL polyols, which both set monthly production records during 1976. An expansion of the plant for STYRON polystyrene at Guarujá, Brazil, was completed in 1976 and that unit was later judged Dow's best overall polystyrene production plant.

In addition to plant construction or expansions, Dow Latin America made a number of other physical moves to better serve its customers and prepare for the anticipated growth of the 1980's. In Brazil, for example, Dow is developing a network of bulk marine terminals which will accommodate Aratu's expected plant output.

A new site at Franco da Rocha, 30 miles northwest of São Paulo, will soon include a \$5 million research and development center, the Brazil Region administration complex and formulation plants for agro-vet products. The Research and Development organization, known as "R&D South", is already operational and emphasizes applications technology. R&D South is scheduled to move into the Franco da Rocha facilities in mid-1978.

The number of sales offices has also been increased throughout Dow Latin America. In Brazil there are now four sales offices, Colombia opened three new offices in 1976, and new facilities also were opened in Guatemala and the Dominican Republic.

Sales
(Millions of Dollars)



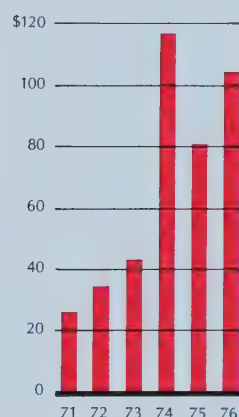
An increasing percentage of Dow Latin America's employees are being hired, trained and developed locally. In a difficult year, such as 1976 definitely was, individual performances were significant, and many "firsts" were recorded.

The first two women sales managers and the first woman manufacturing manager were appointed in Dow Latin America in 1976. The Area also saw its first field salesman move to Dow Chemical U.S.A. in a similar capacity, while another employee became the company's first worldwide technology center manager born outside the United States.

Throughout the world, where Dow facilities are located, nationals of those countries are trained to operate production facilities in their country.



Operating Income
(Millions of dollars)



An additional 36 men and women trainees from the Aratu, Brazil, projects, ranging from technicians to engineers, were sent to the Texas, Louisiana and Western Divisions of Dow U.S.A. for training. Total employment at year end stood at 5,000 of whom 94 per cent are Latin American nationals.

Safety performance improved over 1975 as well. There were three disabling injuries and no fatalities in 1976, compared to seven disabling injuries and one fatality in 1975. An Executive Safety Council in Coral Gables, Florida, headquarters for Dow Latin America, was established. Additional Councils were formed in each region in order to stimulate awareness of Dow's concern for the safety of its employees and their families. A fringe benefit will be the increased involvement of all levels of the organization as safety performance is evaluated.

Latin America is one sector of the world where the environment and the quality of life are emerging concerns. Utilizing Dow's global environmental policy, Dow Latin America, as with other units of the Company, has been able to report positive contributions to air and water quality in its plant communities. Dow Latin America has also increased the awareness of its neighbors, customers and competitors of the need for effective environmental protection, product stewardship, industrial hygiene, safety and loss prevention.

CANADA

While demand for many chemical products in Canada held firm, downward price pressures were experienced from both foreign competition and Canada's anti-inflation program, which forced profit restrictions upon Dow Chemical Canada and other major industries. Aluminum, pulp and paper, railway and construction industries—all significant consumers of chemicals and plastics—experienced lengthy work stoppages due to strikes. In addition, higher costs were experienced in natural gas, oil, power and transportation—all items not subject to Anti-Inflation Board control.

At year end, sales volume was up by 8 per cent, and total sales were \$370 million, but operating income stood at \$68 million, declining 17 per cent from 1975.

During the year, Dow Canada continued its involvement with construction of a \$1.3 billion world-scale petrochemical project in Alberta. Dow's direct share of the project cost ultimately will be about \$600 million. Work has begun at two sites in Alberta: Joffre and Fort Saskatchewan.

At Joffre, Dow is the contract administrator for the design and engineering of a 1.2 billion-pound-per-year world-scale ethylene plant for The Alberta Gas Ethylene Company Ltd. Approximately one half of the ethylene produced at Joffre (from ethane extracted from Alberta's natural gas streams) will be used by Dow as feedstocks for a manufacturing complex at Fort Saskatchewan; and the rest elsewhere.

Construction of new and expanded manufacturing facilities at Fort Saskatchewan ultimately will include world-scale facilities for the manufacture of vinyl chloride, ethylene dichloride, ethylene glycol,



chlorine and caustic soda together with the necessary utilities and site development.

An important part of the Alberta Project is a 1,900-mile pipeline running from Fort Saskatchewan, Alberta, across Saskatchewan and through several northern U.S. states, ending at Sarnia, Ontario. The pipeline will transport ethane and ethylene surplus to Alberta's and Dow's Western Canada Division needs, to other Dow Canada plants in Sarnia and to export markets.

The Dow plants in the Alberta Project, as well as the pipeline, are scheduled to phase into operations beginning in late 1979.

In addition to the Alberta Project, Dow Canada invested more than \$60 million in improvements, expansions and new Dow manufacturing facilities in Canada—a level about equal to previous years.

The amount of product sold that was produced locally was 80 per cent. At year end, Dow Canada had 2,855 employees, of which more than 99 per cent are Canadians. During the

Superior stress-crack and corrosion resistance characteristics made DERAKANE vinyl ester resins the preferred choice of the maker of this glass reinforced plastic tank, which is used to haul hydrochloric acid in a shuttle between several points in Canada.

year, Dow Canada experienced six disabling injuries and one fatality.

Energy conservation is a continuing objective of Dow Canada. During the year, several developments occurred in efforts to optimize the utilization of valuable natural resources.

Sarnia Division's third gas turbine is scheduled to be in operation in 1977, thus maintaining this site's "Total Energy Concept" as one of the world's most energy-efficient utility complexes. Gas turbines, waste heat recovery boilers and steam turbines are utilized to provide the total steam and electrical needs of the Division.

About 25 per cent of Dow Canada's capital spending in 1976 was directed to numerous projects associated with meeting commitments in

ecology, energy conservation, industrial hygiene and in safety and loss prevention.

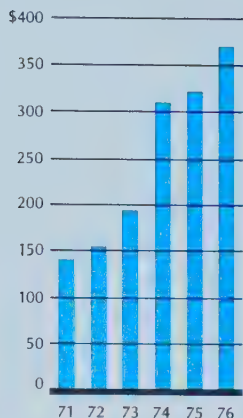
At Sarnia, a bio-oxidation processing unit, for the removal of organic wastes from plant effluents, was completed.

Energy conservation objectives were met by means of various projects in existing plants as well as technological innovations incorporated into the design of new plants. Similarly, Dow Canada's commitment to excellence in industrial hygiene practices was intensified during the year. Sarnia Division opened a new, enlarged facility integrating occupational health, medical and laboratory functions at one location.

New plant design greatly assists in the energy conservation program by utilizing more of the available energy within a process and by the installation of more efficient systems or equipment. For example, in new ethylene oxide and vinyl chloride plants, the combustion air to the furnaces is being heated by the waste stack gases. This improves the efficiency of the furnace by approximately 11 per cent. For those processes operating under a vacuum condition, new vacuum pumps are replacing the conventional steam ejectors with a resultant 20 per cent savings in energy.

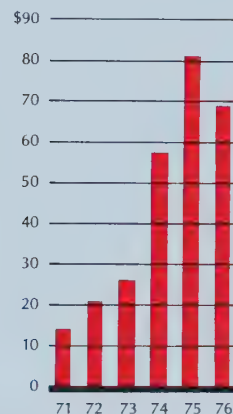
In order to acquire assured long term reserves of natural gas for use as feedstock and fuel, Dow Canada continued its successful participation with Dome Petroleum in a joint exploration and development program in Western Canada. At year end, Dow had participated in the drilling of 207 wells. In both developmental and exploratory drilling, the success ratio was better than the industry average.

Sales
(Millions of Dollars)



New areas of arable land are being opened at a fast rate in Canada to meet the country's growing agricultural demands. An important part of this undertaking is the installation of efficient land drainage systems, accomplished through the use of

Operating Income
(Millions of Dollars)



plastic drain tile. Dow Canada research and development efforts led to a specific grade of high density polyethylene that can be extruded efficiently to produce a corrugated pipe to help meet these needs. Also, 1976 saw the first registration for *TORDON* herbicide in Canada as a broadcast treatment on agricultural land. Initial sales efforts in 1977 introducing this product will be concentrated in Alberta.

The first Canadian application of the Dow paving system was applied to a bridge deck in Windsor, Ontario. The latex modified concrete mix was installed on a trial deck 28' x 212' for the Ontario Ministry of Transportation and Communications. The inherent advantages of the system are good freeze-thaw resistance, high resistance to de-icing salts, and high tensile, flexural and compressive strengths.

With the on-going search for new petroleum sources in Canada, the need for low cost, high quality pipe increases. Steel pipe with a tough protective coating can satisfy this demand. Dow Canada research developed a superior grade of high density polyethylene which is resistant to ultra-violet degradation and whose properties allow the fast extrusion of a smooth, tough, integral coating which endures the harsh Canadian climate. Developments such as this serve as an example of Dow's commitment to meet public needs.

Growers in Canada's tobacco belt in southern Ontario consider TELONE soil fumigant essential for high crop quality and yield. About one-third of the tobacco grown in Ontario is exported to the United States and the United Kingdom.



PACIFIC

Nowhere does business operate in a vacuum, and that is particularly so in the complex of countries, cultures and political systems which comprise the area in which Dow Chemical Pacific operates. To put 1976 for Dow Pacific into reasonable perspective, the Company's growth and prospects need to be considered in conjunction with political and economic developments within the area.

Positive political developments occurred, indicating a willingness of countries and people with diverse cultures and interests to work together to enhance political and economic stability in Asia.

Among those developments which will help create a stable political environment in the area in which Dow Pacific operates are the strengthening of relationships among the countries of the Association of Southeast Asian Nations (ASEAN), the succession of a relatively moderate group to leadership of the People's Republic of China and the Vietnamese initiative to establish improved relations with non-communist Asian nations.

Along with greater political stability, 1976 saw an improvement in economic conditions in the area. Particularly noteworthy was the growth in the export-oriented economies of Korea, Taiwan and Hong Kong. This was a plus for Dow Chemical Pacific, which has an important position as a supplier of plastics and other raw materials to export industries in those countries.

Japan's economy recovered, albeit more slowly than the smaller East Asian countries. Dow Pacific total sales, responding to that recovery, rebounded to a level 50 per cent higher than 1975 to \$270 million. Operating income grew 81 per cent. Sales by Asahi-Dow, an associated company, also were up 21 per cent to \$371 million and its profits were down 11 per cent to \$8.6 million.



Korea Pacific Chemical Corporation, 50 per cent owned by Dow, produces polyethylene film used in temporary greenhouses to protect young plants in the spring from late frosts, thus increasing the growing season in Korea.

In Australia and New Zealand, general industrial growth was slower, but with complete manufacturing, marketing and development organizations in both countries, Dow produced sales and profits growth substantially outpacing the local economies.

Only in South Asia, a region composed primarily of agricultural countries, was Dow Pacific's business growth disappointing. Large accumulations of pesticide inventories, coupled with a decline in demand for some agricultural products produced by those countries, depressed sales growth.

After an accident free year in 1975, Dow Pacific recorded the first fatality in its 10 year history in an accident at the Hong Kong polystyrene plant.

Turning to the tangible dimensions of 1976 business, Dow Pacific experienced an outstanding recovery of

physical volume, increasing 40 per cent, surpassing the previous year-to-year physical volume growth record set in 1973.

The strongest sales performing group was chemicals and metals. Magnesium ingot sales were at record levels despite the sluggish performance of the aluminum industry, which uses magnesium as an alloying ingredient. Local shortages of raw materials for polyvinyl chloride manufacturing enabled Dow Pacific to generate high-volume sales of ethylene dichloride and vinyl chloride monomer produced in the United States.

Sales of agricultural products, while showing modest growth over 1975, were affected by competition, high field inventories and reductions in government funding programs.

Plastics sales were strong, and both the pharmaceutical and specialty designed products businesses showed improved fourth-quarter results after slow starts.

Production facilities in Dow Pacific manufactured 32 per cent of the product sold in the area.

Dow Pacific invested \$30 million in capital expansion projects during the year, with a 70,000-metric-ton annual capacity plant for polystyrene in Hong Kong requiring most of that amount.

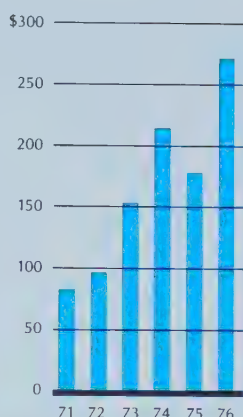
Progress was marked on a number of other projects which will help provide the area's future production bases. These bases, discussed below, will give Dow Pacific the best possible combination of strength in the market place and access to economical raw material sources.

Process design and financing arrangements were completed on the two largest commitments, a 100 per cent Dow-owned chlor-alkali facility and 50 per cent owned Korea Pacific Chemical Corporation plants for the production of ethylene dichloride, vinyl chloride monomer and low-density polyethylene at Yeo-Su, Korea. Total investment in both projects is expected to exceed \$220 million, with Dow's share about \$168 million.

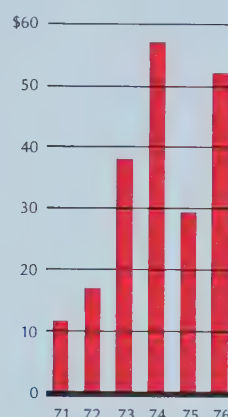
In Thailand, construction of a 15,000-metric-ton plant for the production of polystyrene got under way, with completion at the site near Bangkok scheduled early in 1978.

Land was purchased at Kinu-Ura, near Nagoya, Japan, and engineering was begun on a plant to produce corrosion-resistant *DERAKANE* resins used in producing reinforced plastics. Kinu-Ura is also intended to be the site for production of other relatively low-volume, high-value products, such as polyols and insecticides.

Sales
(Millions of Dollars)



Operating Income
(Millions of Dollars)



Products made with Dow produced plastics find their way into many common household end use utensils around the world.

Renewed interest was exhibited by Australian federal and state governments in a Dow-developed plan for a petrochemical complex at Redcliff, South Australia. The company is carefully re-evaluating economics and long-term hydrocarbon feedstock positions relative to this project.

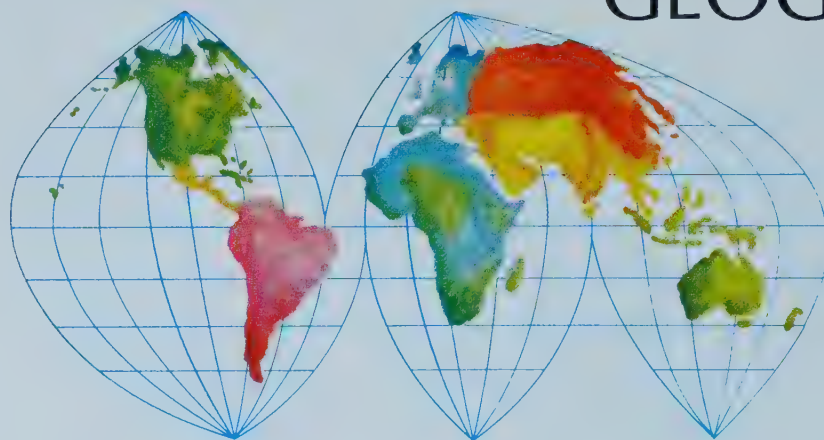
Late in 1976, Dow and the Indonesian government signed a memorandum of understanding on negotiations for a possible large-scale ethane-based petrochemical project in the province of Aceh, northern Sumatra. The document set guidelines for developing the essential elements of the complex project.

The business of Dow's 20-50 per cent owned companies in the Pacific also improved substantially. The four companies, which have 21 plants in four countries and employ more than 5,000 people, sold a total of \$552 million worth of products based mostly on Dow technology.

Also in Japan, the government authorized Dow's Japanese subsidiary to include chlor-alkali production as a permitted activity in its corporate charter. A thorough economic feasibility study for chlorine and derivatives production continued through 1976. Several sites are under consideration for a chlorine and olefin-based chemical production complex, although no decision to build such a complex has yet been made.

In the past 10 years, Dow Pacific has planned and built an effective network of marketing, manufacturing and product development operations throughout the Pacific area which enables the company to compete profitably in all of the countries in which it markets its products. Having this network manned with Dow people in the diversity of economies which can be served with a broad mix of products from several sources gives Dow Pacific a sound base for continuing profitable growth.

GEOGRAPHIC RESULTS



(dollars in millions)

Sales	1976	1975	1974	1973	1972
United States	\$3,076.9	\$2,724.1	\$2,619.1	\$1,662.5	\$1,382.9
Europe/ Africa	1,502.8	1,272.7	1,389.3	827.5	591.1
Latin America	432.4	387.1	401.4	232.2	177.7
Canada	369.8	322.8	313.9	192.9	154.7
Pacific	270.2	181.4	214.8	152.8	97.3
TOTAL	\$5,652.1	\$4,888.1	\$4,938.5	\$3,067.9	\$2,403.7

Operating Income	1976	1975	1974	1973	1972
United States	\$ 632.2	\$ 628.8	\$ 503.4	\$ 215.5	\$ 185.2
Europe/ Africa	229.6	248.9	399.9	185.0	100.8
Latin America	104.3	81.3	116.7	43.7	34.4
Canada	68.1	82.0	57.2	26.2	20.9
Pacific	52.4	29.0	57.4	37.8	16.7
TOTAL	\$1,086.6	\$1,070.0	\$1,134.6	\$ 508.2	\$ 358.0

Gross Plant Properties	1976	1975	1974	1973	1972
United States	\$3,805.7	\$3,126.5	\$2,616.3	\$2,177.7	\$1,984.1
Europe/ Africa	1,289.3	1,096.3	915.6	750.0	670.1
Latin America	329.6	216.2	135.0	75.9	62.8
Canada	471.4	430.8	373.8	267.1	242.4
Pacific	91.3	63.3	41.1	30.6	21.4
TOTAL	\$5,987.3	\$4,933.1	\$4,081.8	\$3,301.3	\$2,980.8

Capital Expenditures	1976	1975	1974	1973	1972
United States	\$ 750.9	\$ 565.6	\$ 530.7	\$ 259.8	\$ 213.4
Europe/ Africa	200.2	185.2	170.6	87.5	88.0
Latin America	117.5	84.7	36.1	16.4	11.6
Canada	87.2	63.2	121.7	32.2	39.7
Pacific	30.4	22.8	10.9	5.8	6.3
TOTAL	\$1,186.2	\$ 921.5	\$ 870.0	\$ 401.7	\$ 359.0

Employees (thousands)	1976	1975	1974	1973	1972
United States	31.9	31.2	30.6	29.5	28.9
Europe/ Africa	11.6	12.1	12.2	11.0	11.0
Latin America	5.0	5.4	6.2	5.3	5.3
Canada	2.8	2.8	2.8	2.5	2.5
Pacific	1.7	1.6	1.5	1.5	1.1
TOTAL	53.0	53.1	53.3	49.8	48.8

FINANCIAL REVIEW

1976 was a year of recovery from the severe recession of 1975, although the timing and extent of the recovery varied among the economies of the world. Because of Dow's broad product and geographical diversification, the Company was able to cope with world economic environments and post once again an increase in overall sales of its products and services. Sales reached \$5.65 billion, an increase of 15 per cent from sales of \$4.89 billion in 1975.

Dow's share of the sales of companies in which our ownership ranges from 20-50 per cent increased 14 per cent in 1976 and totaled approximately \$818 million.

Despite a substantial increase in sales, operating income increased only 2 per cent, due to cost-price pressures on our products in many parts of the world. Net income declined 3 per cent to \$613 million. Net income per share in 1976 was \$3.30, down from the restated record net income of \$3.41 per share in 1975.

COSTS AND SELLING PRICES The price per unit of purchased hydrocarbon raw materials and fuels increased 17 per cent in 1976, but the rate of increase was less than in previous years. Since 1971, unit costs for these materials have risen 364 per cent. Other costs such as labor, construction and transportation continued to increase.

Dow's global selling prices at the end of 1976 were up about 2.7 per cent. Outside the U.S., the ability to increase prices enough to cover rising costs was frustrated partially by foreign currency fluctuations, and in some cases, major devaluations. Our ability to price our products to cover increasing costs also was complicated by price and profit controls imposed by several governments in countries where Dow manufacturers and sells its products. In spite of significant increases in the prices of our products in 1974 and 1975, and the necessity to increase prices further to cover the rapid escalation of costs for hydrocarbon feedstocks and fuel, Dow's prices over the last 20 years have not contributed signifi-

cantly to the inflationary cycle. During that period, Dow's selling price index has only risen at a compounded rate of 1.9 per cent per year; while the U.S. price index for wholesale industrial commodities has had an annual growth rate of 3.5 per cent.

DIVIDENDS Once again Dow increased its dividends paid during 1976 from \$.725 per share (restated) in 1975 to \$.90 per share, a 24 per cent increase over 1975. Our dividend has increased in each of the last 17 years and has protected stockholders against inflation. From 1971 to 1976, Dow's dividends have increased an average 15 per cent annually, substantially exceeding the 7 per cent U.S. Consumer Price Index average annual increase. During the year Dow again maintained its record of being the only U.S. industrial company, to our knowledge, never to have reduced its dividends since it began paying them regularly in 1911.

CAPITAL SPENDING Dow continued an aggressive capital expansion program in 1976, spending a record \$1.186 billion, compared to \$921 million in 1975.

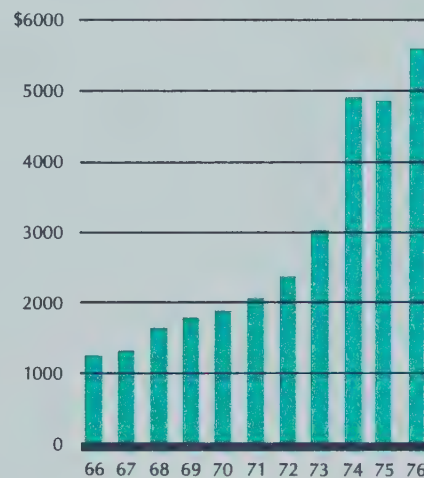
Significant dollars were allocated for projects to improve plant operating efficiencies and to better utilize scarce raw materials and energy. Of the total capital spending, about 20 per cent was allocated for fuel, feedstock and utility projects, and the remainder was spent for new plant capacity additions, plant improvements and replacement of obsolete facilities.

Present expectations are for capital spending to be about \$1.1 billion in 1977. Included in that spending will be continuing expenditures for pollution control and further development of hydrocarbon feedstock supplies, which will help provide appropriate raw materials security for Dow, as well as offsetting anticipated cost increases.

FINANCING Internal generation of funds in 1976 continued very strong. Cash flow (net income plus depreciation) was \$1.017 billion. During the year the Company sold \$200 million

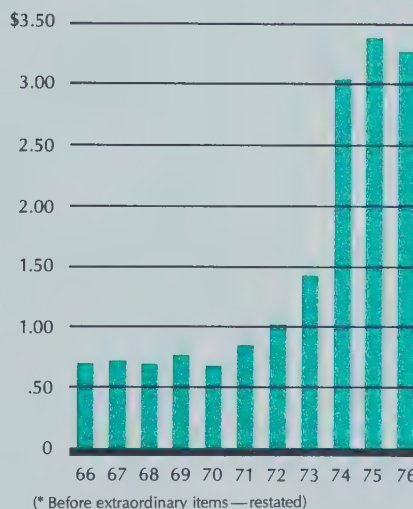
Sales

(Millions of Dollars)



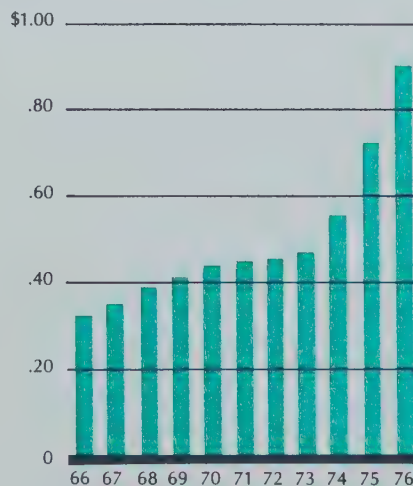
Earnings per Share*

(Dollars)



Dividends Paid Per Share

(Dollars)



FINANCIAL REVIEW

of 8.5 per cent 30-year debentures. Other long-term borrowing during the year included \$120 million in 10-year Eurodollar loans.

Net interest expense increased from \$97 million in 1975 to \$150 million in 1976. Among the reasons for this increase are an increase in total debt, resulting from the Company's aggressive capital spending program, which is designed to keep our facilities modern and efficient; lower income earned on Dow held marketable securities, and additional working capital requirements, including certain import deposit programs imposed by countries facing balance of payment problems.

Dow's total debt increased in 1976, but total net interest expense remains less than 15 per cent of our profit before tax, which is significantly less than the average for all U.S. non-financial companies. Dow's ratio of debt to debt-plus-equity remained below 45 per cent, and our financial position remains strong.

OTHER ITEMS The Company has a conservative accounting system, and practices on a worldwide basis last in, first out method of accounting for most of its inventories, uses accelerated depreciation globally and accrues as an expense 100 per cent of potential DISC tax liabilities. The new "replacement cost" accounting calculation has little effect on our reported costs.

A stock distribution occurred in June, 1976 as part of stockholder approval at the Company's annual meeting of

a two-for-one stock split and an increase to 500 million in the number of common shares authorized.

The level of employee commitment to the Company is exemplified by over 40 per cent of our U.S. employees owning Dow stock. During the year, the Company purchased 1,318,464 shares of its common stock to help offset the increase in the number of shares outstanding that would otherwise result from sales of stock to our employees.

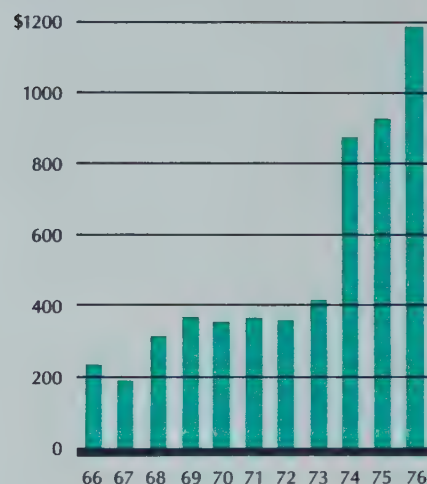
Participation of shareholders continues strong in the Automatic Dividend Reinvestment Program, which provides stockholders an economical and convenient way to reinvest automatically their dividends in additional shares of Dow common stock. To date, more than 14,000 shareholders are enrolled in this program.

During the year, the number of stockholders increased by 14,000, of which 11,900 were individuals. Of the Company's \$613 million net income, cash dividends declared were \$176 million, and the remaining earnings were reinvested in the Company, thus increasing stockholder equity.

The Company also paid \$1.108 billion in wages, salaries and fringe benefits to its employees around the world and paid more than \$596 million in income, property and other taxes to various governments. Income paid to employees and taxes paid by the Company help to finance individual human and social needs.

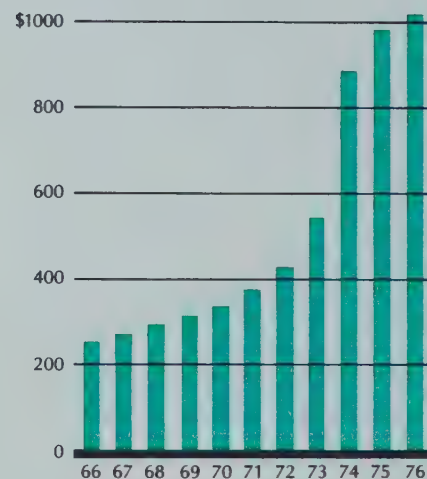
Capital Spending

(Millions of Dollars)



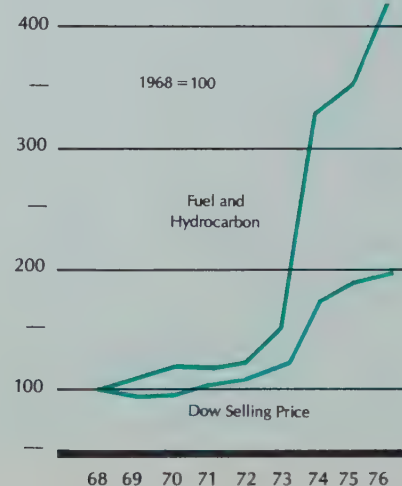
Cash Flow*

(Millions of Dollars)



(* Cash Flow = Net Income before extraordinary items and depreciation)

Fuel and Hydrocarbon/ Dow Selling Price Indexes



Consolidated Statement of INCOME

	Year Ended December 31	
		(Restated)
	1976	1975
Products and Services		
Net sales	\$5,652,069,729	\$4,888,114,202
Operating costs and expenses:		
Cost of sales	4,133,570,435	3,404,473,577
Selling and administrative	431,917,397	413,670,368
	<u>4,565,487,832</u>	<u>3,818,143,945</u>
Operating income	<u>1,086,581,897</u>	<u>1,069,970,257</u>
 Non-Products and Services		
Investment and financial:		
Profit on investment turnover	11,589,156	20,836,713
Income from sundry investments	808,851	716,482
Equity in earnings of non-consolidated subsidiaries	7,142,286	3,864,220
Administrative expenses	<u>(1,290,789)</u>	<u>(1,343,528)</u>
	<u>18,249,504</u>	<u>24,073,887</u>
Equity in earnings of associated companies and minority investments exceeding 20%	52,215,773	50,528,579
Interest expense—net	(149,833,874)	(96,796,234)
Sundry income—net	<u>33,755,977</u>	<u>66,493,157</u>
Non-products and services income (loss)	<u>(45,612,620)</u>	<u>44,299,389</u>
 Income Before Provision for Taxes on Income	1,040,969,277	1,114,269,646
Provision for Taxes on Income	<u>421,600,000</u>	<u>476,027,661</u>
Income Before Minority Interests	619,369,277	638,241,985
Minority Interests' Share in Income	<u>6,602,692</u>	<u>5,856,564</u>
Net Income	<u><u>\$ 612,766,585</u></u>	<u><u>\$ 632,385,421</u></u>
 Earnings per Share	\$3.30	\$3.41

See Accounting Principles and Notes to Financial Statements

Consolidated BALANCE SHEET

	December 31	
	1976	(Restated) 1975
ASSETS		
Current Assets		
Cash	\$ 40,936,787	\$ 25,097,234
Marketable securities and interest-bearing deposits (at cost—approximately market)	91,309,394	349,813,988
Accounts and notes receivable:		
Trade, less allowance for doubtful receivables (1976, \$37,600,735; 1975, \$39,244,744)	881,278,343	754,735,444
Miscellaneous	374,996,841	242,686,381
Deferred income tax benefits	67,053,981	73,283,069
Inventories:		
Finished and in process	646,330,736	527,192,992
Materials and supplies	352,547,640	287,382,772
	<u>2,454,453,722</u>	<u>2,260,191,880</u>
Investments		
Capital stock—at cost plus equity in accumulated earnings (less reserves—1976, \$2,867,316; 1975, \$4,157,316):		
Banking and insurance subsidiaries	69,120,943	63,379,544
Associated companies (50% owned)	299,435,741	260,995,026
Other	80,801,558	73,105,850
Sundry—at cost (less reserves—1976, \$2,100,857; 1975, \$2,192,028)	26,837,328	29,147,266
Noncurrent receivables (less reserves— 1976, \$1,276,858; 1975, \$7,598,268)	131,508,597	121,305,324
	<u>607,704,167</u>	<u>547,933,010</u>
Plant Properties	5,987,278,500	4,933,165,822
Less—Accumulated depreciation	2,433,358,376	2,146,104,313
	<u>3,553,920,124</u>	<u>2,787,061,509</u>
Unexpended Pollution Control Funds	<u>67,503,406</u>	<u>98,538,901</u>
Goodwill	<u>83,588,887</u>	<u>84,467,970</u>
Deferred Charges and Other Assets	<u>81,493,663</u>	<u>65,995,544</u>
TOTAL	<u>\$6,848,663,969</u>	<u>\$5,844,188,814</u>

See Accounting Principles and Notes to Financial Statements

Consolidated BALANCE SHEET

	December 31	
		(Restated)
LIABILITIES	1976	1975
Current Liabilities		
Notes payable	\$ 429,333,755	\$ 268,555,708
Long-term debt due within one year	64,442,984	76,694,456
Accounts payable	671,257,052	544,496,606
United States and foreign taxes on income	129,605,717	224,502,007
Accrued and other current liabilities	403,861,128	368,859,024
	<u>1,698,500,636</u>	<u>1,483,107,801</u>
 Long-Term Debt	 <u>1,878,474,304</u>	 <u>1,563,218,709</u>
 Other Liabilities		
Minority interests in subsidiary companies	50,492,093	46,495,814
Deferred employee benefits	32,037,121	40,973,833
Deferred income taxes	324,149,467	260,042,919
Other		1,582,183
	<u>406,678,681</u>	<u>349,094,749</u>
 Stockholders' Equity		
Common stock	495,698,354	492,239,386
Capital surplus	428,790,235	384,959,169
Retained earnings	<u>2,198,514,993</u>	<u>1,762,004,778</u>
	3,123,003,582	2,639,203,333
 Less—Treasury stock at cost	 <u>257,993,234</u>	 <u>190,435,778</u>
	<u>2,865,010,348</u>	<u>2,448,767,555</u>
 TOTAL	 <u><u>\$6,848,663,969</u></u>	 <u><u>\$5,844,188,814</u></u>

Consolidated Statement of CAPITAL SURPLUS

	Year Ended December 31	
	1976	1975
Balance at Beginning of the Year	\$ 384,959,169	\$ 349,658,994
Add:		
Excess of selling or market price over par value of common stock issued to employees	36,905,674	30,079,340
Income tax benefit realized from sale of common stock to employees	6,626,133	4,107,501
Excess of face value of debentures over par value of common stock issued on conversion	11,463	38,647
Retirement and reissuance of treasury shares	287,796	1,074,687
Balance at End of the Year	\$ 428,790,235	\$ 384,959,169

Consolidated Statement of RETAINED EARNINGS

	Year Ended December 31	
	1976	1975
Balance at Beginning of the Year (as previously reported)	\$1,763,793,403	\$1,288,065,661
Decrease resulting from changes in accounting for contingencies and for translation of foreign currencies	1,788,625	18,511,583
Balance at Beginning of the Year (as adjusted)	1,762,004,778	1,269,554,078
Add (Deduct):		
Net income	612,766,585	632,385,421
Adjustment related to consolidation of subsidiary companies	(224)	288,804
Retirement of treasury shares	(75,488)	(1,249,286)
Cash dividends declared	(176,180,658)	(138,974,239)
Balance at End of the Year	\$2,198,514,993	\$1,762,004,778

See Accounting Principles and Notes to Financial Statements

Consolidated Statement of CHANGES IN FINANCIAL POSITION

	Year Ended December 31 (In thousands)	
	1976	(Restated) 1975
Source of Working Capital		
Net income	\$ 612,767	\$ 632,385
Charges (credits) to income not involving working capital:		
Depreciation	404,181	347,428
Equity in net income of non-consolidated companies, less dividends received	(40,561)	(40,344)
Deferred income taxes	64,107	80,033
Other — net	1,203	1,824
Proceeds from sale of investments, less gains reflected in net income	4,764	4,543
Provided from operations	1,046,461	1,025,869
Issuance of long-term debentures and notes	320,000	225,000
Issuance of pollution control bonds		97,525
Pollution control funds released by trustees	31,036	
Sale of common stock to employees	46,994	37,659
Increase in other liabilities		6,753
Disposal of plant property and sundry	15,153	20,904
	<u>1,459,644</u>	<u>1,413,710</u>
Use of Working Capital		
New property, plant and equipment	1,186,193	921,471
Cash dividends	176,181	138,974
Purchase of treasury stock	67,659	38,790
Decrease in long-term debt	4,728	64,520
Increase in unexpended pollution control funds		77,955
Increase in noncurrent investments	23,983	6,106
Increase in deferred charges and other	22,031	3,346
	<u>1,480,775</u>	<u>1,251,162</u>
Increase (Decrease) in Working Capital	<u><u>\$ (21,131)</u></u>	<u><u>\$ 162,548</u></u>
Increase (Decrease) in Current Assets		
Cash and marketable securities	\$ (242,665)	\$ (48,432)
Receivables	258,853	25,630
Deferred taxes	(6,229)	5,949
Inventories	184,303	91,944
Decrease (Increase) in Current Liabilities		
Notes payable and current portion of long-term debt	(148,527)	(76,891)
Accounts payable	(126,760)	37,502
Income taxes and accruals	59,894	126,846
Increase (Decrease) in Working Capital	<u><u>\$ (21,131)</u></u>	<u><u>\$ 162,548</u></u>

See Accounting Principles and Notes to Financial Statements

ACCOUNTING PRINCIPLES

Consolidation The accompanying consolidated statements include the assets, liabilities, revenues and expenses of all significant subsidiaries except for a bank and insurance company. Because of the nature of their operations, the accounts of the bank and insurance company are not consolidated. However, their earnings are included in consolidated net income under the equity method of accounting.

Non-Consolidated Equity Investments Investments in companies which are 20%-50% owned are carried on the equity basis. Marketable equity securities are carried at the lower of cost or market. Other investments are carried at cost less reserves.

Translation of Foreign Currencies Cash, marketable securities, receivables, and liabilities other than deferred income taxes are translated at current rates. Property, inventories, investments in capital stock and deferred income taxes are translated at rates prevailing when the transactions occurred.

Revenues and expenses are translated at appropriate current rates for each month, except that depreciation is recorded at historical rates. Exchange gains and losses are reflected in income currently.

Inventories Inventories are stated at cost, which is less than market value. Cost is determined on the last-in, first-out basis, except for operating supplies, which are carried on the first-in, first-out basis.

Plant Properties and Depreciation Land, buildings and equipment are carried at cost less accumulated depreciation. Depreciation is based on the estimated service lives of depreciable assets and is provided using the declining balance method.

Expenditures for renewals and betterments are capitalized, and maintenance and repairs are charged to income as incurred.

Fully depreciated assets are retained in the property and depreciation accounts until they are removed from service. In the case of disposals, the assets and related depreciation are removed from the accounts and the net amount, less proceeds from disposal, is charged or credited to income.

Goodwill The excess of the cost of investments in consolidated subsidiaries over carrying value of assets acquired is shown as goodwill. Goodwill arising since October 1970 is amortized over 40 years. In the opinion of

management, goodwill prior to that date requires no amortization.

Retirement Plans The Company and certain subsidiaries have plans which provide retirement benefits for eligible employees. The major plan covers substantially all full-time United States employees. The policy is to accrue and fund pension cost as computed by an actuary.

Investment Turnover The profit or loss resulting from the disposal of investments held for resale is segregated in the statement of income as investment turnover.

Taxes on Income and Investment Credits The companies compute and record income taxes currently payable based upon their determination of taxable income which may be different from pretax accounting income. These differences may arise from recording in pretax accounting income transactions which enter into the determination of taxable income in another period. The tax effect of these timing differences is recognized by adjustment currently to the provision for taxes.

Provision is made for income taxes on unremitted earnings of subsidiary and 50%-owned companies to the extent that such earnings are determined not to be permanently invested, and on the income of certain subsidiaries which is fully taxed in the United States as earned. Income taxes are provided on the undistributed income of 20%-49% owned companies at the time the Company records its equity in such earnings.

A portion of the taxes due on foreign operations conducted through a domestic international sales corporation (DISC) is deferrable under U.S. tax rules. However, it is the practice of the Company to fully accrue such taxes currently.

Laws governing the determination of United States and certain foreign income taxes provide for investment credits which are allowable generally upon completion of qualified facilities. Such credits are reflected as a reduction of income tax expense on the flow-through basis in the year in which they are earned.

In addition to tax credits, certain foreign countries provide investment incentives which are granted to encourage new sites in less developed areas. It is the practice of the Company to defer the initial grants earned and offset them against the larger site development and startup expenses usually incurred. The excess, if any, of grants earned over expenses incurred at new sites is amortized over the life of the facilities. Grants resulting from expansion of established sites are credited to income as earned.

Notes to FINANCIAL STATEMENTS

A. Restatement of Prior Years On June 7, 1976 the Company issued additional shares to effect a two-for-one stock split authorized by the stockholders on May 5, 1976. Simultaneously the stockholders approved an increase in the Company's common stock from 200,000,000 shares with a par value of \$5 each to 500,000,000 shares with a par value of \$2.50 each. The changes required in the number of shares and per share amounts have been reflected in the financial statements and notes included herein.

Financial Accounting Standards Board Statement No. 5, Accounting for Contingencies, and Statement No. 8, Accounting for the Translation of Foreign Currency Financial Statements, require conformity with their provisions for 1976 and subsequent years. To the extent that adjustments of a significant nature were necessary, retroactive application was required. Accordingly, the balance sheet, income statement and statement of retained earnings presented herein for the year 1975 have been restated. The effect of these changes was to increase 1975 net income \$16.7 million, or \$.09 a share.

B. Inventories The amount of the reserve required to reduce inventories from the first-in, first-out basis to the last-in, first-out basis at December 31, 1976 and 1975 was \$339 million and \$276 million, respectively.

C. Investments The Company's equity in the net assets of investments accounted for by the equity method approximates the carrying amount of such investments. Dividends received from the companies were \$18.8 million in 1976 and \$14.0 million in 1975.

D. Marketable Equity Securities Sundry investments at December 31, 1976 and 1975 included marketable equity securities, at cost, in the amount of \$7.4 million and \$15.1 million, respectively. The market value of these securities exceeded cost by \$8.0 million at December 31, 1976 and \$12.7 million at December 31, 1975, after deducting \$0.5 million and \$3.0 million, respectively, of unrealized losses.

E. Plant Properties Plant properties consisted of the following:

	(In thousands)	
	December 31	
	1976	1975
Land	\$ 111,346	\$ 94,036
Land and waterway improvements ..	145,954	109,163
Buildings	453,938	409,520
Machinery and other equipment	3,840,838	3,281,776
Wells and brine systems	129,435	100,119
Furniture and fixtures	76,642	62,363
Other	158,892	162,409
Construction in progress	1,070,233	713,780
Total	5,987,278	4,933,166
Less—accumulated depreciation ...	2,433,358	2,146,104
Net	<u>\$3,553,920</u>	<u>\$2,787,062</u>

F. Leased Properties Minimum rental commitments under non-cancelable leases, substantially all of which pertain to manufacturing facilities and transportation equipment, are as follows:

	(In thousands)		
	Financing leases	Operating leases	Total
1977	\$28,879	\$34,258	\$ 63,137
1978	26,374	20,620	46,994
1979	21,248	15,671	36,919
1980	18,312	13,743	32,055
1981	16,596	11,578	28,174
1982-1986	68,419	35,782	104,201
1987-1991	44,725	13,849	58,574
1992-1996	24,289	4,111	28,400
After 1996	14,633	671	15,304

Rental payments charged to expense in 1976 and 1975 were \$99.5 and \$92.8 million, respectively, including \$31.7 and \$30.4 million relating to non-capitalized financing leases.

If the financing leases were capitalized and if applicable straight line depreciation and imputed interest were substituted for rentals, the effect on net income would not be material.

G. Unexpended Pollution Control Funds Proceeds from the sale of pollution control bonds by various local municipalities are deposited with the respective trustees pending reimbursement to the Company for qualified expenditures. These funds are restricted to the use for which they were intended. The unpaid liability is included in long-term debt (See Note H).

Notes to FINANCIAL STATEMENTS

H. Long-Term Debt and Available Credit Facilities Details of long-term debt due after one year were as follows:

	(In thousands) December 31	
	1976	1975
Promissory notes:		
4.50%, final maturity 1990	\$ 85,000	\$ 90,000
5.00%, final maturity 1991	72,000	76,000
8.00%, final maturity 1986	120,000	
Debentures:		
4.35%, final maturity 1988	57,956	60,768
6.70%, final maturity 1998	82,807	88,000
7.75%, final maturity 1999	87,984	91,882
8.875%, final maturity 2000	138,000	144,000
8.90%, final maturity 2000	138,000	144,000
7.40%, final maturity 2002	99,403	100,000
7.625%, final maturity 2003	100,000	100,000
8.50%, final maturity 2005	225,000	225,000
8.50%, final maturity 2006	200,000	
Bonds:		
5.75%, final maturity 1980, Swiss franc	24,490	22,901
6.25%, final maturity 1986, Swiss franc	40,816	38,168
6.25%, final maturity 1988, Swiss franc	32,653	30,534
8.50%, final maturity 1989, Swiss franc	23,265	22,901
Pollution control bond obligations	140,525	140,525
Other:		
Foreign currency loans	104,439	104,656
Dollar loans	106,927	84,788
	1,879,265	1,564,123
Less unamortized debt discount	791	904
Total	<u>\$1,878,474</u>	<u>\$1,563,219</u>

Installments due on long-term debt in the five years after 1976 are (in millions): 1977, \$64.4; 1978, \$64.1; 1979, \$91.0; 1980, \$94.8; 1981, \$69.0.

The Company had approximately \$257 million of committed credit unused and available at December 31, 1976 under agreements with various United States and Canadian banks which require retention of average cash balances aggregating approximately \$25 million. These requirements were satisfied by balances maintained for normal business operations.

Other unused credit included \$110 million available to the Company under revolving credit agreements, and \$206 million for use by foreign subsidiaries.

I. Stockholders' Equity The authorized capital stock includes preferred shares of 25,000,000 with a par value of \$1.00 per share, none of which has been issued. The common capital stock, as shown in the accompanying financial statements, reflects the action of stockholders on May 5, 1976 which increased the number of such shares authorized from 200,000,000 shares with a par value of \$5.00 per share to 500,000,000 shares with a par value of \$2.50, and which authorized the subsequent distribution of shares on June 7, 1976 resulting from a two-for-one stock split. The explanations in this note recognize such action.

Changes in the number and amount of issued shares of common stock were:

	Shares	(In thousands) Amount
Issued January 1, 1975	195,500,630	\$488,751
Sold to employees	1,389,002	3,473
Conversion of debentures	6,122	15
Issued December 31, 1975	196,895,754	\$492,239
Sold to employees	1,381,773	3,454
Conversion of debentures	1,815	5
Issued December 31, 1976	<u>198,279,342</u>	<u>\$495,698</u>

Treasury stock at December 31, 1976 and 1975 was 12,853,712 shares at cost of \$257,993,234 and 11,541,034 shares at cost of \$190,435,778, respectively.

The Company's Award Plan permits the granting during the ten-year period ending May 1979 of 2,100,000 shares of Restricted or Deferred Stock, or a combination thereof, to selected employees in lieu of cash for services. Deferred stock awarded in 1976 and 1975 was 4,656 and 5,534 shares, respectively; no restricted stock was issued. At December 31, 1976, there were 1,806,844 shares available for grant. The Plan also provides for the granting of Dividend Units. Each Unit represents the right to receive for a specified period cash payments equivalent in value to cash dividends paid during such period on one share of common stock. Dividend Units granted and available for grant, respectively, were 407,960 and 1,092,040 at December 31, 1976. At December 31, 1975 they were 403,960 and 1,096,040, respectively.

Other plans for granting to officers and key employees options to purchase common stock at the fair market value at date of grant were authorized in 1967, 1972 and 1976.

Notes to FINANCIAL STATEMENTS

Changes in the number of shares optioned under the three plans were:

	1976	1975
Outstanding January 1	2,425,940	2,278,478
Granted	832,300	717,250
Exercised	(685,249)	(567,508)
Expired or terminated	(1,628)	(2,280)
Outstanding December 31	2,571,363	2,425,940
Available for grant December 31	2,453,578	284,250
Price range on outstanding options at December 31	\$20.73 to \$53.94	\$16.83 to \$44.25

A management incentive plan provides for granting to key employees, including officers and directors, incentive awards which are related to consolidated net income. Awards may be made in cash, Dividend Units or Deferred Stock, or a combination thereof. There were no awards under this plan in 1976, as compared to \$2,480,000 in 1975.

The Company made offerings of common stock to its employees in 1976 and 1975 at prices of \$46.00 and \$34.375 a share, respectively, payable generally through payroll deductions. There were unfilled subscriptions for 426,857 and 684,774 shares, respectively, at December 31, 1976 and 1975. Unfilled subscriptions may be cancelled at the option of the employee. Partial payments on these subscriptions aggregating \$13,482,294 and \$15,360,315 at December 31, 1976 and 1975, respectively, are included in current liabilities.

In computing earnings per share, no adjustment was made for common shares issuable under stock purchase and option plans because there would be no material dilutive effect.

J. Taxes on Income The provision for taxes on income consisted of:

	(In millions)		(Restated)	
	1976		1975	
	Current	Deferred	Total	Total
United States:				
Federal	\$230.5	\$ 58.2	\$288.7	\$330.4
State and local	14.5		14.5	24.1
Foreign	105.8	12.6	118.4	121.5
	<u>\$350.8</u>	<u>\$ 70.8</u>	<u>\$421.6</u>	<u>\$476.0</u>

The current tax provision was reduced by investment tax credits of \$68.5 million in 1976 and \$31.6 million in 1975. Deferred tax provisions related to the following:

	(In millions)	
	1976	1975
Excess of depreciation claimed for tax purposes over book depreciation	\$34.3	\$18.8
Provision for doubtful accounts and other losses in excess of those allowed for tax	3.9	(3.4)
Undistributed earnings of foreign subsidiaries deemed not to be permanently invested	5.4	14.2
Income of export companies exempt from U.S. income tax in the current year	16.3	32.8
Intercompany profit eliminated in consolidation	3.2	(5.4)
Application of LIFO method in countries where it is not allowed for tax purposes	(.5)	1.1
Other	8.2	15.9
	<u>\$70.8</u>	<u>\$74.0</u>

Effective consolidated tax rates for 1976 and 1975 were 40.5% and 42.7%, respectively. Major differences between these rates and the United States statutory rate were:

	Percent	
	1976	1975
Statutory rate	48.0	48.0
U.S. investment credits	(5.9)	(2.8)
Taxes on income from foreign sales at rates different from U.S. statutory rate	(.2)	(1.6)
Untaxed equity in income of companies whose accounts are not consolidated	(2.3)	(2.1)
State and local income tax (net of federal tax) .....	.7	1.1
Other .....	.2	.1
Effective rate	<u>40.5</u>	<u>42.7</u>

Unremitted earnings of subsidiary and 50%-owned companies which are deemed to be permanently invested amounted to approximately \$783 million and \$560 million at December 31, 1976 and 1975, respectively.

Income tax returns filed in the United States for all years through 1973 have been examined by the Internal Revenue Service. Resolution of unresolved issues is not expected to have a material effect on income.

Notes to FINANCIAL STATEMENTS

K. Retirement Plans The cost of all retirement plans in 1976 and 1975 was \$82,708,000 and \$65,708,000, respectively.

The Tax Reform Act of 1976 provides that the Company is entitled to an additional one percent investment tax credit if a like amount is used to acquire its stock for distribution to employees. To carry out those provisions, the Company established an Employee Stock Ownership Plan. As a result, 1976 retirement costs include \$5,900,000 which was offset in income tax expense by an equivalent amount of investment tax credit.

For the major plan, fund assets at market exceeded the actuarially determined value of vested benefits by \$3,665,000 at December 31, 1976.

Payments from the fund to beneficiaries of the Company's major plan were \$17,555,000 in 1976 and \$14,526,000 in 1975.

L. Foreign Exchange In 1976 there were net exchange losses of \$39,963,000 as compared to restated net exchange gains in 1975 of \$20,074,000 (See Note A).

M. Investment Grants Sundry income includes investment grants of \$29,932,000 in 1976 and \$1,852,000 in 1975.

N. Contingent Liabilities Suits have been started against the Company and certain subsidiaries because of alleged product damage and other claims. All suits are being contested and the amount of uninsured liability thereunder is considered to be adequately covered.

If a nuclear power plant being constructed by Consumers Power Company at Midland, Michigan is not completed, Consumers may claim that the Company is obligated to pay to Consumers certain costs presently estimated at \$62,000,000. The Company may also have a claim against Consumers for failure to perform its obligations.

A Canadian subsidiary has entered into a 20 year agreement to purchase substantially all of the output of an ethylene plant to be constructed in the Province of Alberta. The owner of the plant, The Alberta Gas Ethylene Company, Ltd., is arranging to borrow up to \$373,750,000 which will be guaranteed as to principal and interest by the Company. The borrowing is to be repaid in monthly installments ending in 1998.

O. Estimated Replacement Cost (Unaudited) The relatively high rates of inflation experienced worldwide in recent years has focused attention on the propriety of using historical cost as the basis for valuation of assets and liabilities and for determination of income from operations. A number of government and independent bodies are considering the need for appropriate alternatives. To date, no single method has earned general acceptance as a satisfactory alternate.

The Securities and Exchange Commission has mandated that beginning in 1976 certain companies must submit as a part of their annual reports to the Commission selected items of information stated on the basis of estimated replacement costs, which include depreciation calculated under straight-line methods. A summary of that information, along with a comparison to historical cost, is presented in the following table:

	Estimated Replacement Cost	Historical Cost
	<i>(In millions)</i>	
As of December 31, 1976:		
Inventories	\$1,338	\$ 999
Plant Properties, less accumulated depreciation	4,907	3,554
For the year ended December 31, 1976:		
Depreciation	449	404
Other operating expenses	4,171	4,161

The Company concurs with the objectives of identifying and disclosing the effects of inflation on operating results. While these required estimates and disclosures are quite limited in scope and do not portend to show the total impact of inflation, management, nevertheless, feels they are useful as approximations pending development of more comprehensive inflation accounting techniques. In the use of these estimates, then, due allowance should be made for their inherent lack of precision.

A more comprehensive analysis of replacement cost data, along with an explanation of the methods and assumptions used in its preparation may be found in Form 10-K, Annual Report to the Securities and Exchange Commission. A copy of that report is available upon written request to the Secretary of the Company, 2030 Dow Center, Midland, Michigan 48640.

Notes to FINANCIAL STATEMENTS

P. Quarterly Statistics Unaudited results were as follows (in millions, except per share):

<u>1976</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>	<u>Total</u>
Net sales	\$1,371.2	\$1,395.0	\$1,430.8	\$1,455.1	\$5,652.1
Operating income	270.9	279.8	288.6	247.3	1,086.6
Net income	141.6	155.3	167.3	148.6	612.8
Earnings per share .....	.76	.84	.90	.80	3.30
Cash dividends paid per share .....	.20	.20	.25	.25	.90
Market price range of common stock on the N.Y. Stock Exchange from 1 / 1 to 4 / 29. Consolidated Transaction Reporting System thereafter:					
High	57.25	56.13	48.50	44.75	57.25
Low	45.94	46.75	43.50	38.38	38.38

1975 (Restated)

Net sales	\$1,138.0	\$1,197.4	\$1,274.5	\$1,278.2	\$4,888.1
Operating income	224.2	255.1	309.1	281.6	1,070.0
Net income	110.4	154.4	215.7	151.9	632.4
Earnings per share .....	.60	.83	1.16	.82	3.41
Cash dividends paid per share .....	.175	.175	.175	.20	.725
Market price range of common stock on the N. Y. Stock Exchange:					
High	39.13	46.44	47.00	47.75	47.75
Low	26.88	36.00	41.82	41.75	26.88

As described in Note A, 1975 was restated and quarterly results, as originally reported, were increased (decreased) as follows:

Net income	(15.5)	11.1	35.5	(14.4)	16.7
Earnings per share	(.08)	.06	.19	(.08)	.09

Opinion of Independent Public Accountants

THE DOW CHEMICAL COMPANY

We have examined the consolidated balance sheet of The Dow Chemical Company and its subsidiary companies as of December 31, 1976 and 1975, and the related consolidated statements of income, retained earnings, capital surplus, and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial position of The Dow Chemical

Company and its subsidiary companies as of December 31, 1976 and 1975, and the results of their operations and the changes in their financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis after restatement for the changes, with which we concur, in the methods of accounting for contingencies and translation of foreign currencies as described in Note A to the financial statements.

Haskins & Sells

Detroit, Michigan, February 18, 1977

MANAGEMENT'S DISCUSSION and ANALYSIS of the CONSOLIDATED STATEMENT of INCOME

1976 versus 1975

Net Sales. Economic conditions in major countries of the world in 1976 experienced a relatively slow growth from a recessionary situation in 1975. 1976 sales of \$5,652 million were up 15 percent over the prior year, an increase of \$764 million of which \$600 million was due to additional volume and the remainder due to increased selling prices.

A comparison of the changes in net sales by product lines is shown below.

	Percent Increase (Decrease) From Prior Year	
	1976	1975
Chemicals and Metals	11	5
Plastics and Packaging	32	(14)
Bioproducts and Consumer Products	—	10
All product lines	15	(1)

Price controls enforced by government authorities in many countries continued to be a limiting factor on the 1976 sales performance of the Bioproducts line as sales prices, in most cases, were not permitted to rise sufficiently to offset inflationary conditions. Broad product and market diversification allowed the Company to compensate the effect of weak demand for some of the products, particularly in the chemicals group.

Product line mix changed slightly as a 32 percent improvement in the Plastics and Packaging business increased its share of total sales to 33 percent, compared to 29 percent in 1975.

United States and Canadian Areas continued their growth as sales increased 13 percent and 15 percent, respectively. All areas achieved a substantial recovery in sales over 1975 and an increase over the previous record levels established in 1974. Compared to 1975, Pacific Area was up 49 percent; Europe, 18 percent; and Latin America, 12 percent.

Distribution of sales among the geographic areas remained relatively unchanged, with United States representing 55 percent of total sales.

Cost of Sales, as a ratio of sales, was 73.1 percent in 1976 versus 69.6 percent in 1975, reflecting the fact that cost escalation outpaced price increases. Unit prices for energy and raw materials escalated more rapidly than in 1975. Total expenditures for labor and fringe benefit costs showed an increase of 13 percent in 1976. Maintenance and repair costs were \$362 million in 1976 versus \$303 million in 1975, up 19 percent. Research and development expenditures were \$187 million in 1976 versus \$167 million in 1975, up 12 percent.

Equity in Earnings of Non-consolidated Subsidiaries included a gain of \$4 million on translation of foreign currencies in 1976, compared to a loss of \$2 million in 1975.

Equity in Earnings of Companies 20%-50% Owned increased to \$52 million in 1976 from \$50 million in 1975. The strong recovery in Dow Corning was partially offset by losses in Dow Badische.

Interest Expense—Net was up \$53 million over 1975, due to additional borrowing and use of funds for expansion of the operations.

Sundry Income—Net showed a decrease of \$33 million. Most of the change relates to unfavorable impact from translation of foreign currencies which amounted to a \$44 million loss in 1976 versus a \$22 million gain in 1975. This charge was partially offset by an increase of \$28 million in investment grants related to expansion of facilities in foreign countries.

Income Tax effective rate was 40.5 percent in 1976 versus 42.7 percent in 1975, mainly due to increased investment tax credits, as explained in Note J to Financial Statements.

1975 versus 1974

In 1975, sales of \$4,888 million were down 1% from the prior year. Unit volume decreased about 10%, or \$500 million, which was almost offset by price increases. The Chemicals and Metals business was 5% ahead of the record levels established in 1974. Firming prices counterbalanced the effect of reduced demand in most products. Sales of the Plastics and Packaging lines of business were down 14% in 1975. Economic conditions were particularly weak in those sectors in which plastics are used, notably automotive and housing. Sales growth of 10% in 1975 of the Bioproducts and Consumer Products line was limited by price controls and soft market conditions for bulk pharmaceutical chemicals. The product mix in each of the lines remained relatively constant compared to prior year.

In 1975, cost of sales remained essentially at the same level of the prior year, despite the slight drop in sales. Feedstock and energy costs, which went up sharply in 1974, have continued to rise but at a slower pace in 1975. Expenditures for labor and fringe benefit costs showed a normal increase of 10% in 1975. Maintenance and repair costs were \$303 million in 1975 versus \$286 million in 1974, up 6%, reflecting the higher costs of maintaining increased plant facilities. Research and development expenditures were \$167 million in 1975 versus \$149 million in 1974, up 13%.

As a ratio of sales, cost of sales was 69.6% in 1975 versus 68.8% in 1974.

1975 profit on investment turnover benefited from a gain of \$20 million on sales of investments outside the United States. The fluctuation in earnings of nonconsolidated subsidiaries was related to a Swiss banking subsidiary.

The Company's equity in the income of companies 20% to 50% owned declined by \$12 million in 1975 reflecting the depressed worldwide business conditions.

Additional borrowings in 1975 and use of funds for expansion of the operations increased interest expense by \$17 million. The benefits realized in 1974 from temporarily investing at higher interest rates funds obtained from long-term borrowing were not available in 1975.

Sundry income increased \$113 million in 1975, due primarily to foreign exchange gains versus losses in 1974, profit on sale of a foreign investment, increased royalties and lower valuation reserve provisions.

The effective income tax rate in 1975 was 42.7% versus 48.1% for 1974. The higher tax rate in 1974 was principally the result of providing additional taxes on earnings of export companies.

Distribution of 1976 Income Dollar

Cash Dividends Declared	3.0
Earnings Invested	7.5
Depreciation	6.9
Taxes	10.2
Wages, Salaries and Benefits	18.9
Raw Materials, Supplies and Services	53.5

PRODUCT GROUP RESULTS

(dollars in millions)

	1976	1975	1974	1973	1972
Sales					
Chemicals / Metals	\$3,047.9	\$2,747.6	\$2,621.5	\$1,522.3	\$1,169.0
Plastics / Packaging	1,891.3	1,428.9	1,671.3	1,003.9	789.6
Bioproducts /					
Consumer Products ..	712.9	711.6	645.7	541.7	445.1
TOTAL	\$5,652.1	\$4,888.1	\$4,938.5	\$3,067.9	\$2,403.7

PRODUCT GROUP ANALYSIS

Chemicals / Metals Group	Uses	Approximate % of Group Sales	
		1976	1975
Inorganic Chemicals		25	30
Major Products			
Caustic soda	Production of paper, alumina, rayon, petroleum products and industrial chemicals		
Chlorinated solvents	Metal cleaning, dry cleaning, paint removers		
Chlorine	Chemical intermediate, water treatment, paper		
Ethylene dibromide	Leaded gasoline, soil and grain fumigant		
Organic Chemicals		30	30
Major Products			
Acetone	Solvent, production of methyl methacrylate		
Ethylene glycol	Antifreeze, polyester fiber production		
Glycerine	Alkyd resins, tobacco products		
Isocyanates and VORANOL polyglycols	Rigid, elastomeric and flexible urethane products and foams		
Phenol	Plastic resins and adhesives		
Propylene glycols	Polyester resins, pet food humectant		
Metals		10	10
Major Products			
Magnesium sheet, plate and extrusions	Commercial and military products		
Magnesium ingot	Aluminum alloys, steel processing		
Functional Products, Oil & Gas Division & Misc.		35	30
Major Products & Services			
Calcium chloride	Highway deicing & dust control		
Dow Industrial Service	Industrial equipment cleaning		
Dowell Division	Petroleum production services		
Ethylene	Chemical intermediate		
Hydroscience Associates, Inc.	Waste treatment engineering		
Wanda Petroleum	Trading and marketing of petroleum products		
Total sales (\$ million)		100% \$3048	100% \$2748
Plastics / Packaging Group			
Molding Materials		50	50
Major Products			
Acrylonitrile-butadiene- styrene (ABS)	Used in injection molding, blow molding and extrusion processes for fabrication of articles and in the automotive, appliance, packaging, wire and cable, housewares, toy and construction industries		
High density polyethylene			
Low density polyethylene			
STYRON polystyrene			

Operating Income

	1976	1975	1974	1973	1972
Chemicals / Metals	\$ 617.4	\$ 690.2	\$ 618.8	\$ 206.5	\$ 156.3
Plastics / Packaging	388.4	298.6	457.7	223.5	154.5
Bioproducts/ Consumer Products ..	80.8	81.2	58.1	78.2	47.2
TOTAL	\$1,086.6	\$1,070.0	\$1,134.6	\$ 508.2	\$ 358.0

Plastics / Packaging Group (Cont.)

Uses

Approximate
% of Group Sales

Coatings and Monomers

Major Products

Epoxy resins	Coatings, adhesives, laminates
Styrene-butadiene latexes	Paper and carpeting
Styrene monomer	Production of polystyrene plastic.
Vinyl chloride monomer	Production of polyvinylchloride plastic

Plastic Products

Major Products

Polyethylene film	Industrial packaging, agricultural use
Polystyrene film and sheet	Functional and decorative packaging
STYROFOAM polystyrene foam	Insulation, floral and craft uses.
SARAN film	Commercial packaging

Total sales (\$ million)

1976 1975

40 35

10 15

100% 100%
\$1891 \$1429

Bioproducts and Consumer Product Group

Health Care Products and Services

Major Products & Services

Bio-Science Enterprises	Diagnostic services
Diagnostic products and equipment	Medical laboratory tests
NOVAHISTINE products	Cough and cold preparations
RIFADIN and RIFOCIN antibiotics ..	Broad spectrum antibiotics used primarily for TB treatment

Agricultural Chemicals

Major Products

COYDEN and ZOAMIX coccidiostats	Treatment of poultry disease
DURSBAN insecticide	Broad range insecticide
Phenoxy herbicides	Weed and brush control
TORDON herbicide	Weed and brush control

Consumer Products

Major Products

DOW Bathroom Cleaner	Household use
HANDI-WRAP plastic film	Household plastic film
SARAN WRAP plastic film	Household plastic film
ZIPLOC bags	Food storage

Total sales (\$ million)

45 50

45 40

10 10

100% 100%
\$713 \$711

CONDENSED COMPARATIVE STATEMENTS

		1976	1975
Financial Condition (in millions)	Current Assets:		
	Cash and marketable securities	\$ 132.3	\$ 374.9
	Receivables (less reserves)	1,323.3	1,070.7
	Inventories	998.9	814.6
	Total current assets	2,454.5	2,260.2
	Current Liabilities:		
	Notes payable	429.3	268.6
	Accounts payable and accruals	1,269.2	1,214.5
	Total current liabilities	1,698.5	1,483.1
	Working Capital	756.0	777.1
	Net Property	3,553.9	2,787.0
	Other Assets	840.3	797.0
	Investment (A) plus (B) plus (C)	5,150.2	4,361.1
	Long-Term Indebtedness	1,878.5	1,563.2
	Other Liabilities	406.7	349.2
	Total	2,285.2	1,912.4
	Common Stockholders' Equity (D) minus (E)	\$2,865.0	\$2,448.7
Income (in millions)	Net sales	\$5,652.1	\$4,888.1
	Cost of sales	4,133.6	3,404.5
	Selling and administrative expenses	431.9	413.6
	Operating income	1,086.6	1,070.0
	Investment and sundry income—net	104.2	141.1
	Interest expense	(149.8)	(96.8)
	Non-products and services income (loss)	(45.6)	44.3
	Taxes on income	421.6	476.0
	Minority interests' share in income	6.6	5.9
	Income before extraordinary items and cumulative effect of accounting change	612.8	632.4
	Extraordinary items—net of tax		
	Cumulative effect of accounting change—net of tax		
	Net income	612.8	632.4
	Per share of common stock (in dollars) (*):		
	Income before extraordinary items and cumulative effect of accounting change	3.30	3.41
	Extraordinary items		
	Cumulative effect of accounting change(**)		
	Net income per share	3.30	3.41
	Cash dividends declared .....	.95	.75
	Average common shares outstanding (thousands)	185,412	185,205
Other Statistics (in millions)	Additions to property	\$1,186.2	\$ 921.5
	Depreciation	404.2	347.4
	Research and development expenses	187.5	167.4
	Taxes (major)	596.6	635.7
	Wages and salaries paid	908.3	810.1
	Cost of employee benefits	199.3	170.9
	Number of employees at year-end (thousands)	53.0	53.1
	Market closing price on December 31 (in dollars) (*)	43.38	45.81

Years prior to 1976 have been restated for the changes in the methods of accounting for contingencies and translation of foreign currencies.

(*) Adjusted for stock splits and stock dividends

(**) If the accounting change is applied retroactively, pro forma net income per share would be: 1974, \$3.11; 1973, \$ 1.44; 1972, \$.99.

1974	1973	1972	1966	1956
\$ 423.3	\$ 317.7	\$ 162.5	\$ 127.2	\$ 72.4
1,039.2	744.8	595.4	254.9	77.2
722.6	497.5	423.9	195.2	104.5
2,185.1	1,560.0	1,181.8	577.3	254.1
220.7	214.0	269.6	58.8	
1,349.9	791.1	528.4	229.6	110.7
1,570.6	1,005.1	798.0	288.4	110.7
614.5	554.9	383.8	288.9	143.4
2,233.2	1,778.4	1,649.7	849.7	376.5
674.0	557.7	481.2	311.9	23.0
3,521.7	2,891.0	2,514.7	1,450.5	542.9
1,304.9	1,225.9	1,094.9	552.3	159.7
262.2	130.6	85.3	.8	1.5
1,567.1	1,356.5	1,180.2	553.1	161.2
\$1,954.6	\$1,534.5	\$1,334.5	\$ 897.4	\$ 381.7
\$4,938.5	\$3,067.9	\$2,403.7	\$1,309.7	\$ 565.3
3,398.3	2,229.4	1,760.8	977.5	400.6
405.6	330.3	284.9	130.3	45.6
1,134.6	508.2	358.0	201.9	119.1
41.5	58.3	51.8	25.4	2.4
(79.6)	(83.4)	(85.8)	(17.6)	(4.7)
(38.1)	(25.1)	(34.0)	7.8	(2.3)
527.0	202.6	127.1	81.3	54.6
5.6	9.3	7.9		.4
563.9	271.2	189.0	128.4	61.8
11.7	4.4	.2		
(41.7)				
533.9	275.6	189.2	128.4	61.8
3.05	1.47	1.03	.71	.39
.06	.02			
(.22)				
2.89	1.49	1.03	.71	.39
.60	.49	.45	.33	.17
185,022	184,228	182,648	180,044	159,895
\$ 870.0	\$ 401.7	\$ 359.0	\$ 241.5	\$ 61.0
327.2	263.1	234.9	122.6	73.9
148.7	118.4	104.7	71.3	34.7
613.6	314.3	218.0	118.3	67.2
738.7	611.6	516.4	302.1	140.3
149.0	101.8	85.4	28.8	13.5
53.3	49.8	48.8	35.0	25.2
27.50	28.75	25.38	10.27	10.13

LOCATIONS & HOLDINGS

The Dow Chemical Company
2030 Dow Center
Midland, Michigan 48640
(Area Code 517-636-1000)

UNITED STATES

47 Manufacturing Locations in 22 States*:
Arkansas—Magnolia, Russellville
California—Concord, Costa Mesa, Fresno,
Pittsburg, Torrance, Van Nuys
Colorado—Denver
Connecticut—Gales Ferry, Trumbull
Florida—Miami
Georgia—Dalton, Gainesville, Sylvania
Illinois—Joliet
Indiana—Indianapolis, Zionsville
Iowa—Davenport
Kentucky—Carrollton, Elizabethtown
Louisiana—Breaux Bridge, Napoleonville,
Plaquemine
Michigan—Bay City, Hemlock, Ludington,
Midland (2)
Missouri—Cape Girardeau, Pevely
New Jersey—Carteret
New York—New York
North Carolina—Boonville, Greensboro,
Mebane
Ohio—Findlay, Hebron, Ironton
Oklahoma—Tulsa
Pennsylvania—Royersford
South Carolina—Allendale, Anderson
Texas—Freeport (2), Oyster Creek
Virginia—Williamsburg

Principal Partly Owned Companies:
Cordis Dow Corp., Miami, Florida (50%)
Dow Badische Company, Williamsburg,
Virginia (50%)
Dow Corning Corporation, Midland,
Michigan (50%)
The Kartridg Pak Co., Davenport,
Iowa (50%)
Oasis Pipe Line Company, Houston,
Texas (30%)

EUROPE

31 Manufacturing Locations in 13 Countries*:
Belgium—Seneffe, Tessenderlo
France—Drusenheim, Seclin
Germany—Munich, Rheinmuenster, Stade
Greece—Lavron
Iran—Tehrān
Italy—Anagni, Brindisi, Cinisello, Garessio,
Livorno, Martellago, Milan
Morocco—El Jadida
The Netherlands—Amsterdam, Roden,
Rotterdam, Terneuzen
Portugal—Lisbon
Spain—Bilbao, Madrid, Tarragona
Sweden—Norrköping
United Kingdom—King's Lynn, England (2);
Barry, Wales (2)
Yugoslavia—Zagreb (under construction)

Principal Partly Owned Companies:
Bank Mendes Gans N.V., Amsterdam, The
Netherlands (40%)
Compagnie des Services Dowell
Schlumberger, Paris, France (50%)
DOKI, Zagreb, Yugoslavia (49%)
Dowell Schlumberger Corporation, London,
England (50%)
Dow Banking Corporation, Zurich,
Switzerland (90%)
Dow Chemical Iberica S.A., Madrid,
Spain (98%)
Gruppo Lepetit S.p.A., Milan, Italy (79%)

LATIN AMERICA

19 Manufacturing Locations in 6 Countries*:
Argentina—Buenos Aires, San Lorenzo
Brazil—Aratu (under construction),
Franco da Rocha (under construction),
Guarujá (2), São Paulo (4)
Chile—Concepción, Santiago (2)
Colombia—Bogotá, Cartagena
Ecuador—Quito
Mexico—Cuernavaca, Mexico City,
San Martín

Principal Partly Owned Companies:
Bio-Ciência / Lavoisier S.A.-Análises
Clínicas, São Paulo, Brazil (49%)
Laboratorios Industriales Farmacéuticos
Ecuatorianos, Quito, Ecuador (59%)
Petroquímica-Dow S.A., Concepción, Chile
(70%)
Pirâmides Brasília S.A. Indústria e
Comércio, São Paulo, Brazil (24%)
Propenasa-Produtos Petroquímicos
Nacionais S.A., Guarujá, Brazil (80%)

CANADA

14 Manufacturing Locations in 4 Provinces*:
Alberta—Fort Saskatchewan, Two Hills
British Columbia—Delta
Ontario—Arnprior, Cambridge, Cornwall,
Kitchener, Mississauga,
Richmond Hill, Sarnia,
Toronto (3)
Quebec—Varenes

Principal Partly Owned Companies:
Canadian General-Tower Ltd., Cambridge,
Ontario (49%)
Conn-Chem Ltd., Toronto, Ontario (28%)
Diversey Environmental Products Ltd.,
Mississauga, Ontario (40%)
Iroquois Chemicals Ltd., Cornwall,
Ontario (49%)
Morval-Durofoam Limited, Kitchener,
Ontario (49%)
Wabiskaw Explorations Ltd., Calgary,
Alberta (50%)

PACIFIC

29 Manufacturing Locations in 9 Countries*:
Australia—Altona, Blacktown, Brisbane (2),
Cairns, Mackay, Newcastle, Smithfield
Hong Kong—Hong Kong
India—Bombay, Níra
Indonesia—Medan
Japan—Ageo, Ashigara, Chiba, Hyuga,
Kanuma, Kawasaki (2), Mizushima,
Nobeoka, Sapporo, Suzuka, Totsuka
Korea—Ulsan
Malaysia—Kuala Lumpur
New Zealand—New Plymouth
Thailand—Bangkok (2)

Principal Partly Owned Companies:
Asahi-Dow Limited, Tokyo, Japan (50%)
Consolidated Fertilizers Ltd., Brisbane,
Australia (20%)
Ivon Watkins-Dow Limited, New Plymouth,
New Zealand (51%)
Korea Pacific Chemical Corporation, Seoul,
Korea (50%)
Pacific Chemicals Berhad, Kuala Lumpur,
Malaysia (51%)
Polychem Limited, Bombay, India (25%)

* Includes wholly owned companies and principal partly owned companies

DIRECTORS & OFFICERS

Board of Directors

C. B. BRANCH	Chairman of the Board
EARLE B. BARNES	Executive Vice President
CLYDE H. BOYD	President, Dow Chemical Europe
MELVIN CALVIN*	University Professor, Chemistry, University of California
HERBERT D. DOAN	Partner, Doan Associates (a venture capital company)
HERBERT H. DOW	Secretary
CARL A. GERSTACKER	Chairman, Finance Committee
JULIUS E. JOHNSON	Vice President
J. M. LEATHERS	Vice President, Manufacturing and Engineering Technology
ROBERT W. LUNDEEN	President, Dow Chemical Pacific Limited
H. H. LYON	Vice President and Director of Corporate Administration
ZOLTAN MERSZEI	President and Chief Executive Officer
PAUL F. OREFFICE	President, Dow Chemical U.S.A.
DAVID L. ROOKE†	Vice President, Operations, Dow Chemical U.S.A.
DAVE W. SCHORNSTEIN	President, Dow Chemical Latin America
MACAULEY WHITING**	Consultant
G. JAMES WILLIAMS	Financial Vice President

Officers and Assistant Officers

ZOLTAN MERSZEI	President and Chief Executive Officer
C. B. BRANCH	Chairman of the Board
EARLE B. BARNES	Executive Vice President
CLYDE H. BOYD	Vice President
HERBERT H. DOW	Secretary
WILSON A. GAY	Treasurer
WILLIAM A. GROENING, Jr.	Vice President, General Counsel
A. P. HANMER	Vice President, Controller
I. FRANK HARLOW	Vice President, Tax Counsel
JULIUS E. JOHNSON	Vice President
J. M. LEATHERS	Vice President
H. H. LYON	Vice President
PAUL F. OREFFICE	Vice President
M. E. PRUITT	Vice President
G. JAMES WILLIAMS	Financial Vice President
R. W. BARKER	Assistant Secretary
DALE A. BYWATER	Auditor
LOIS J. HOERLEIN	Assistant Secretary
DAVID N. LeVERT	Assistant Treasurer
FIRMIN A. PAULUS	Assistant Controller
GERTRUDE WELKER	Assistant Secretary

* Retired from the Board of Directors, April 30, 1976.

** Retired from the Board of Directors, December 9, 1976.

† Elected to the Board of Directors, January 6, 1977.

Executive Committee

Zoltan Merszei, Chairman; Earle B. Barnes, C. B. Branch, Herbert H. Dow, H. H. Lyon, Paul F. Orefice, G. James Williams

Finance Committee

Carl A. Gerstacker, Chairman; Herbert H. Dow, Wilson A. Gay, William A. Groening, Jr., A. P. Hanmer, I. Frank Harlow, Paul F. Orefice, G. James Williams, E. C. Yehle

Audit Committee

Herbert D. Doan, Chairman; Herbert H. Dow, Carl A. Gerstacker

Compensation Committee

Carl A. Gerstacker, Chairman; Herbert D. Doan, Herbert H. Dow

Public Interest Committee

Herbert H. Dow, Chairman; Earle B. Barnes, Herbert D. Doan, Julius E. Johnson, Robert W. Lundeen, Paul F. Orefice, Dave W. Schornstein, James H. Pearce, Executive Secretary

Transfer Agents

The Cleveland Trust Company,
The Royal Trust Company, Toronto

Registrars

The Cleveland Trust Company,
Montreal Trust Company, Toronto

Stock Exchange Listings

United States: New York, Midwest,
Pacific;
Europe: Amsterdam, Antwerp, Basel,
Bern, Brussels, Dusseldorf, Frankfurt,
Geneva, Hamburg, Lausanne, London,
Paris, Zurich;
Canada: Toronto
Asia: Tokyo

Certified Public Accountants

Haskins & Sells



THE DOW CHEMICAL COMPANY • MIDLAND, MICHIGAN 48640

